



# OPERATING AND MAINTENANCE INSTRUCTIONS



**CF 2**  
**Robin EX17D**  
**Honda GX160**



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# Preface

These operating and maintenance instructions describe the safe operation of the **CF-2** soil compactors. Please read this operation manual and familiarize yourself with all details of your 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 modify 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 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 machine 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 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 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 soil compactor 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 a 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 regulations and the regulations of the individual countries of use must be followed:

The compactor has been exclusively designed for the compaction of

- sand,
- gravel,
- asphalt,
- dry lean concrete,
- insulating material/perlite

Any other use of the compactor is considered contrary to its designated use. The owner of the 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 compactor by the owner 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

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# 1. Technical Description

## 1.1 Illustration

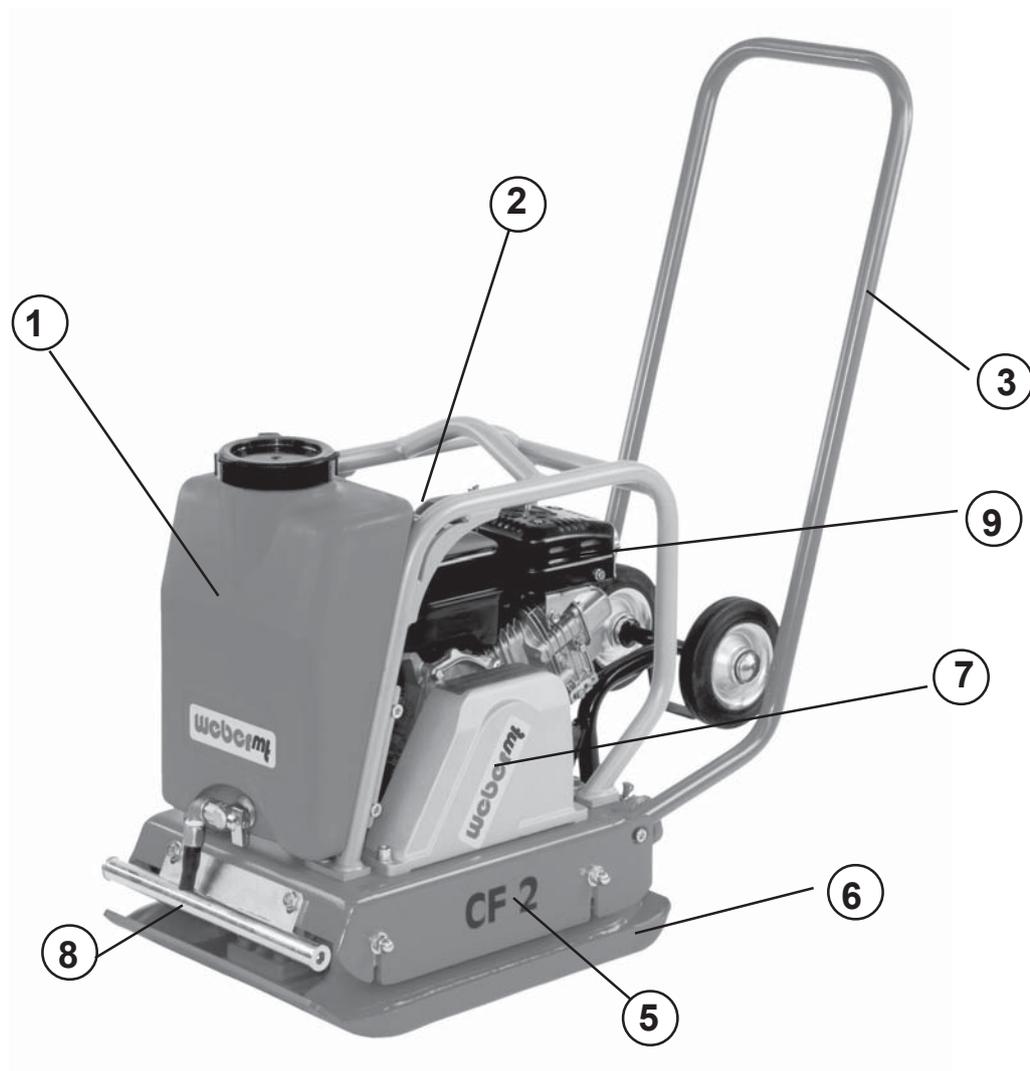


Figure 1 Overall View CF 2

- |                                     |  |
|-------------------------------------|--|
| 1 Water tank (option)               | 6 Base plate                           |
| 2 Fuel tank                         | 7 V-belt guard                         |
| 3 Handle                            | 8 Water sprinkler system (option)      |
| 4 Undercarriage (option)(not shown) | 9 Engine                               |
| 5 Engine bracket                    | Vukollan plate (option)<br>(not shown) |

## 1.2 Machine Description

The **CF 2** soil compactors are machines of the walk-behind type used for compaction in road and trench construction.

### Propulsion

The CF-2 is driven by a Robin gasoline engine (1/9) or a Honda gasoline engine.



### Important!

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

### Function

The engine (1/9) 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 a water sprinkler system (1/1 and 1/8) are available as optional extras. An undercarriage (1/4) can be fitted to the machine to facilitate transport work.

### Operation

The compactor is started with a reversible starter (2.5).

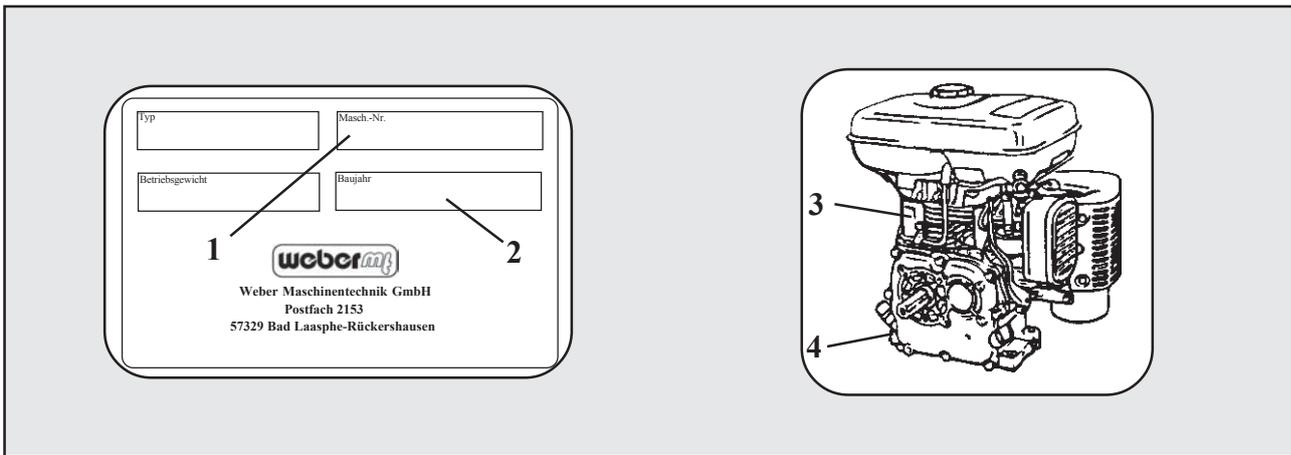
The machine is steered by means of the handle (1/3). The engine speed is controlled directly at the engine (2.5).

## 1.3 Specifications

	CF 2 Robin	CF 2 Honda
<b>Weight</b>		
Operating weight CECE in kg	80	80
<b>Dimensions</b>		
Overall length (in mm)	1030	1030
Overall width (in mm)	440	440
Height with handle folded down (in mm)	980	980
Base plate length, contact area (in mm)	345	345
Transport dimensions LxWxH (in mm)	345x440	345x440
<b>Propulsion</b>		
Engine Manufacturer	Robin	Honda
Type	EX 17 D	GX 160
Max. output acc. to DIN 70020(in kW (HP))	4.2 (5,7) at 4000 rpm	4.0 (5.5) at 3600 rpm
Type of combustion	4-stroke, gasoline	4-stroke, gasoline
Max. operating speed	3600	3600
Travelling speed forward (acc. to soil, in m/min)	25	25
Gradeability (acc. to soil, in %)	30	30
Depth compaction (in cm)	20 - 25	20-25
Performance (in m <sup>2</sup> /h)	528	528
<b>Vibration</b>		
System	one-shaft vibrator	one-shaft vibrator
Mode of driving	mechanical	mechanical
Frequency (in Hz)	98	98
Centrifugal force (in kN)	12	12

	CF 2 Robin	CF 2 Honda
<b>Noise and Vibration Data</b>		
Sound pressure level LPA (at the operator's place, acc. to 2000/14/EG, in dB(A))	91	92
Sound power level LWA (acc. to 2000/14/EG, in dB(A))	108	108
Hand/arm vibration (Weighted root mean square acceleration at the handle, determined acc. to 2002/44/EG, Part 1, in m/s <sup>2</sup> )	7	9

\* 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 Protective Devices

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

Before starting the compactor, the operator must take his personal noise protection measures. The engine is only allowed to be started after is has been assured that the compactor cannot automatically start moving.

#### Conduct in Case of Failures

If defective safety devices or other failures which might affect the safe operation of the 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 compactor. When running the machine , the operator is not allowed to leave the operating controls of the compactor. In addition, he must always have a sufficient visibility on the compactor's zone of operation. The operator must be assisted by a marshaller if the visibility on the zone of operation is restricted because of the operating conditions.

#### 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 compactor is prohibited. When working/travelling on slopes, always use extreme precaution and drive/work directly in uphill or downhill direction.



Moist and loose bases considerably reduce the grip of the 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.



Pay attention to the slippage of the clutch!

#### Exhaust Precautions



Never inhale exhaust gasses. They contain carbon monoxide, a colorless, odorless and extremely dangerous gas which can cause unconsciousness or death. Never operate the engine indoors or in a poorly ventilated area, such as tunnel, 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 compactor under its own power in accordance with paragraph 2.6.

For transporting the compactor over long distances, however, the machine can be transported by means of a special undercarriage (refer to paragraph 2.4.4). In addition, the machine can be lifted on an appropriate transport vehicle (truck, trailer) with 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 locking lever (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 (3/1).



#### **Danger!**

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

- Lift the soil compactor on the transport vehicle.



#### **Danger!**

Do not enter the zone under the suspended load!

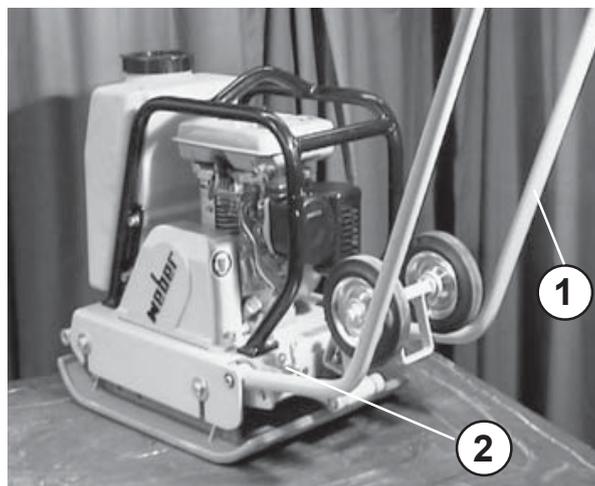


Figure 2

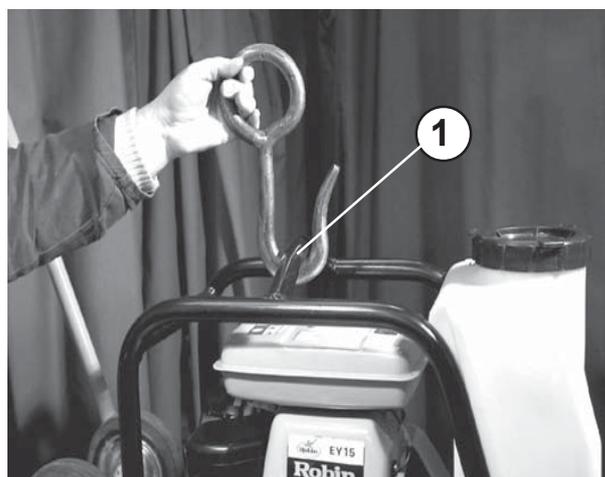


Figure 3

### 2.2.2 Manual Loading

- Put the soil compactor out of operation as described in paragraph 2.7.
- Lock the handle (2/1) with the locking lever (2/2).
- Lift up the soil compactor at the protection frame with the help of a second person.

## 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, top up fuel (refer to paragraph 2.4.1).
- Check the engine oil level, if required top up engine oil (refer to paragraph 2.4.2).
- If desired, fit the damper plate (refer to paragraph 2.4.3).
- If the water sprinkler system is installed, check the water level and top up the tank with clean water if required (refer to paragraph 2.4.5).
- If desired, fit the undercarriage (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.
- Clean the area around the filler neck.
- Undo the tank cap (4/1) to open the fuel tank (4/2).



#### Caution!

Only fill the tank up with clean regular gasoline. Refer to paragraph 3.4 for quantities and specifications.

- Fill the tank up to the bottom edge of the filler neck (5/1).



#### 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 with the filler cap (4/1).

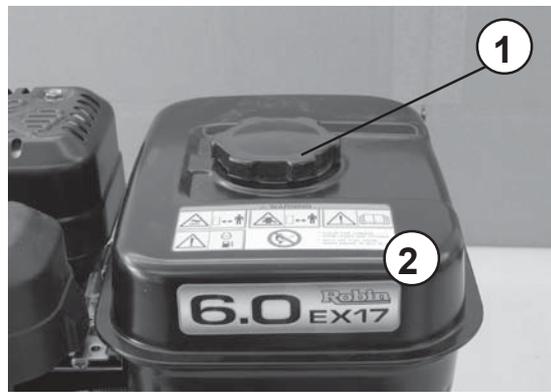


Figure 4



Figure 5

### 2.4.2 Checking the Engine Oil Level



#### Caution!

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

- Pull the oil filler screw with the oil dipstick (6/1) out, wipe it with a clean, non-fluffing cloth and insert it again.



#### Caution!

Do not screw down!!

- Pull out the oil dipstick once again.



#### Caution!

The oil level must reach up to the top mark (7/ max).

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

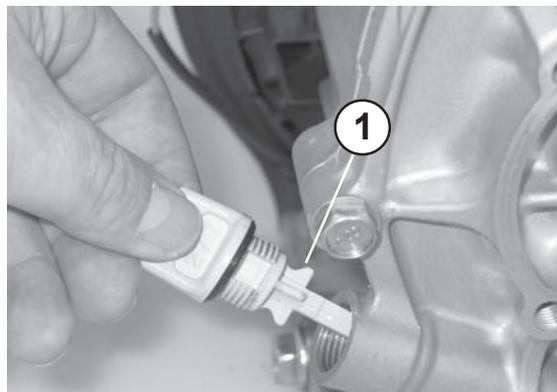


Figure 6

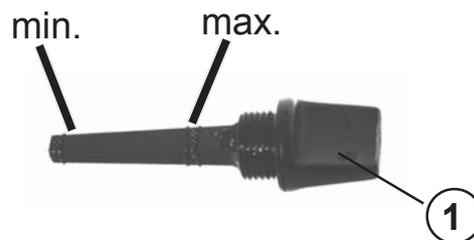


Figure 7

### 2.4.3 Fitting the Damper Plate

- Put the soil compactor out of operation as described in paragraph 2.7.
- The spring bar (8/2) must be engaged.



#### Warning!

If the spring bar is not engaged, the soil compactor cannot be held in tilted position.

- Push the handle (8/1) down to lift the front part of the soil compactor.
- Put the damper plate (9/1) under the base plate (9/4).
- Fix the damper plate (9/1) with the iron bar (9/2) and the screws (9/3) at the front of the base plate (9/4).

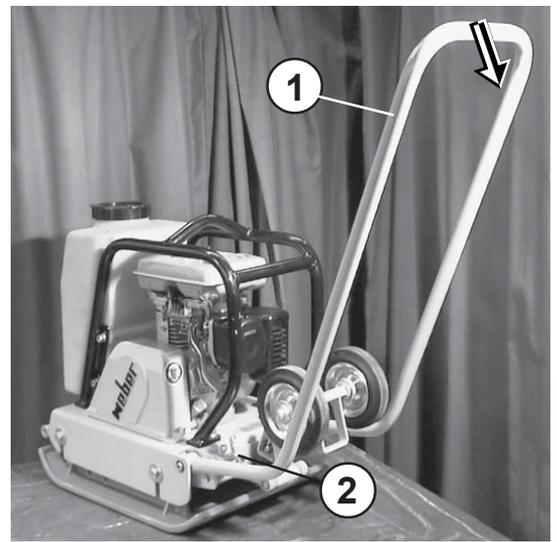


Figure 8

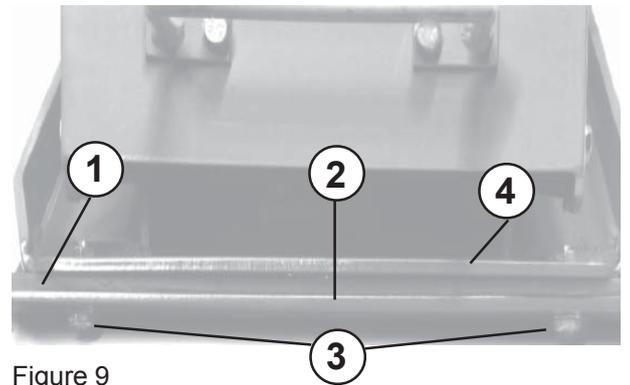


Figure 9

### 2.4.4 Fitting the Undercarriage

- Tighten the two screws (10/2) to fit the undercarriage (11/1) to the engine bracket (10/3).
- Push the handle (8/1) down and lock it by means of the locking lever (8/2).
- Loosen the locking lever (11/2) and fold down the undercarriage (11/1).
- Use the handle (8/1) to tilt the machine to the front and swing the undercarriage (11/1) beneath the base plate (11/3).
- In the working position, the undercarriage (11/1) is folded up and locked in this position by means of the locking lever (11/2).



#### Caution!

During compaction, the locking lever (11/2) must be locked!!

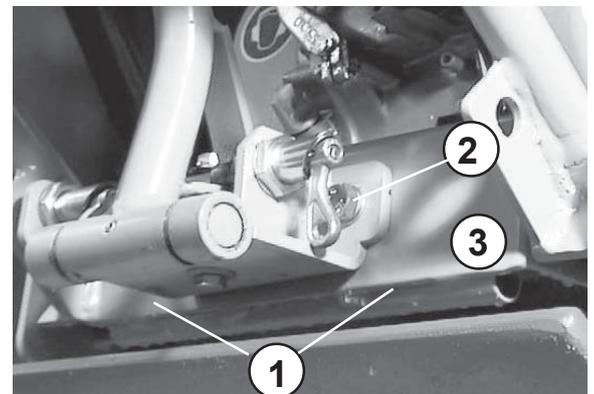


Figure 10

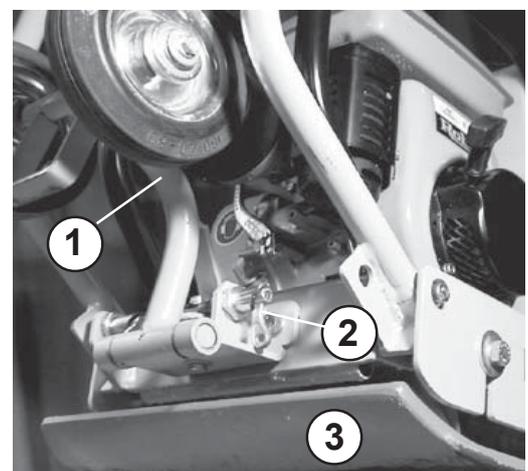


Figure 11

## 2.4.5 Fitting the Water Sprinkler System

- Fasten the sprinkler tube (12/1) with the two screws (12/2) at the front.
- Tighten the two screws (13/2) to fit the water tank (13/1) to the protection frame.
- When the stop valve (13/3) is opened, water is sprayed in front of the machine's base plate (12/1).



### Caution!

Fill the water tank (14/1) up with clean water only, because otherwise the water sprinkler system (12/1) will get choked.

- Open the cap (14/2) to fill up the water tank.



### Caution!

In case of danger of frost, completely drain the water tank (14/1).

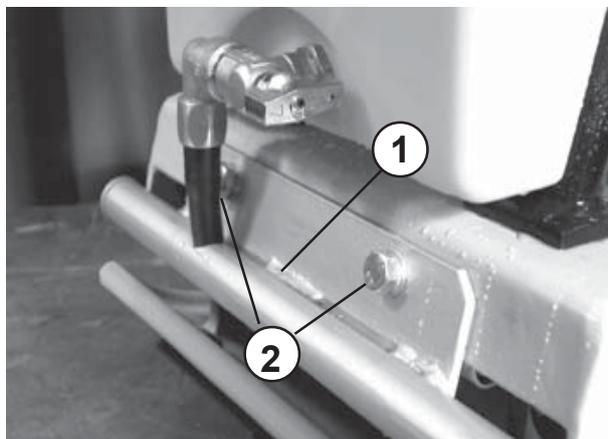


Figure 12

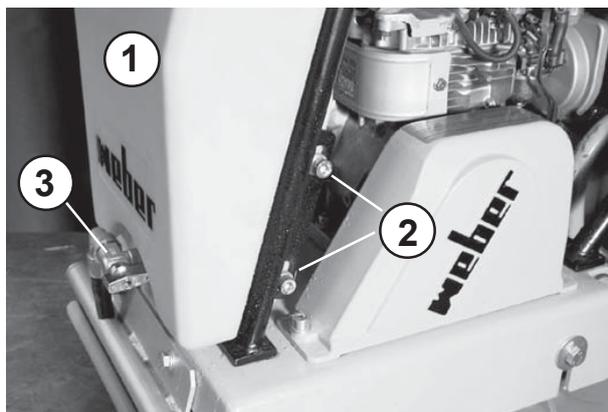


Figure 13

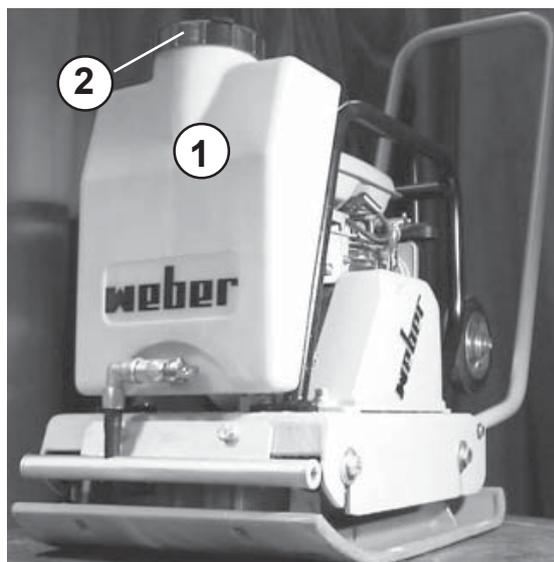


Figure 14

## 2.5 Starting the Engine

### Danger!



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

When starting the compactor in closed premises, always ensure a proper ventilation

- Danger of poisoning!



### Caution!

Never use starting aid sprays.

### 2.5.1 Starting the Robin Engine

- Set the stop button (15/1) to START.
- Push the gas lever (16/1) approx. 1/3 to the left side.
- Put the fuel stop cock (16/3) to vertical position to open it.
- Open or close the choke (16/2) according to the engine and/or ambient temperature.
  - a) In case of a cold engine and/or low ambient temperatures, totally close the choke (16/2) (choke to the left side).
  - b) In case of a warm engine and/or high ambient temperatures, open the choke (16/2) half to all the way (choke to the right side).
- Slowly pull the handle (18/1) of the reversible starter (18/2) until a resistance is felt.
- Let the handle (18/1) recoil to its original position and then firmly pull the cable with both hands to start the engine.



### Important!

If the engine fails to start, repeat the starting procedure.

- As soon as the engine starts, let the starter cable recoil into its housing (18/2).
- Slowly return the choke (16/2) in the fully open position (choke to the right side) and let the engine idle for warming up.

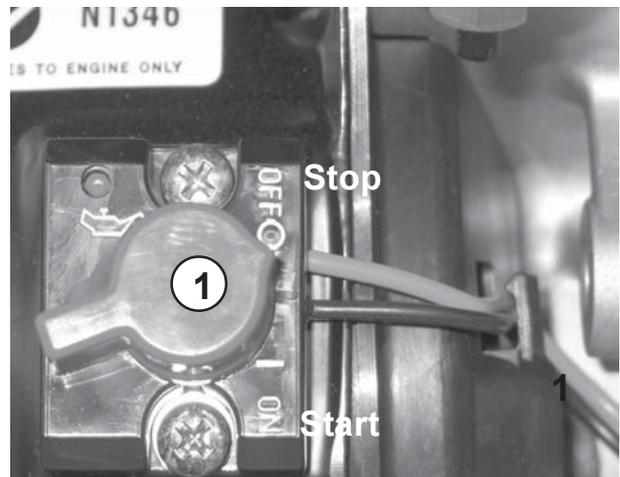


Figure 15

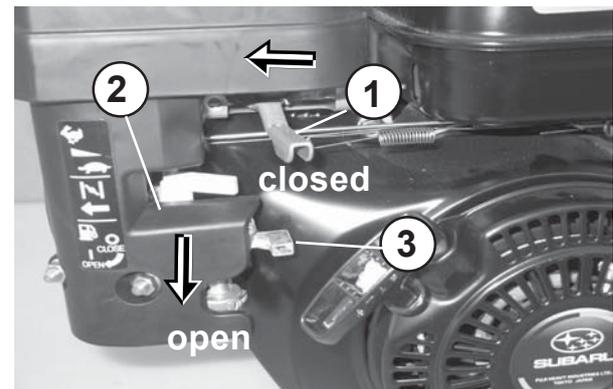


Figure 16



Figure 17

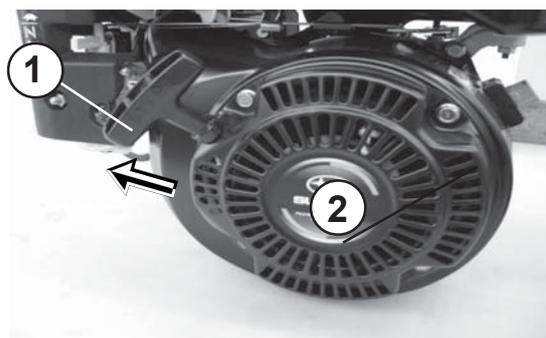


Figure 18

## 2.5.2 Starting the Honda Engine

- Put the stop switch (19/1) to START.
- Push the gasoline cock (20/1) to position "ON"
- Push the gas lever (20/2) approx. 1/3 to the left side.
- In case of a cold engine and/or low ambient temperatures, fully close the choke (20/3) (choke to the left side).
- In case of a warm engine and/or high ambient temperatures, open the choke (20/3) half to all the way (choke to the right side).
- Slowly pull the handle (21/1) of the reversible starter (21/2) until a resistance is felt.
- Let the handle (21/1) recoil to its original position and then firmly pull the cable with both hands to start the engine.



### Important!

If the engine fails to start, repeat the starting procedure.

- As soon as the engine starts, let the starter cable return into its housing (21/2).
- Slowly return the choke (20/3) in the fully open position (choke to the right side) and let the engine idle for warming up.

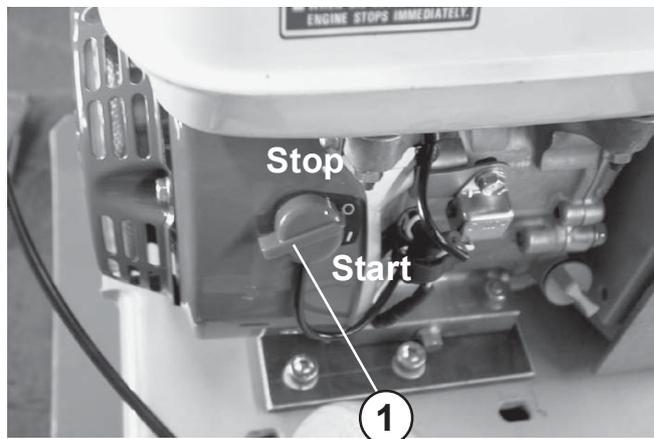


Figure 19



Figure 20

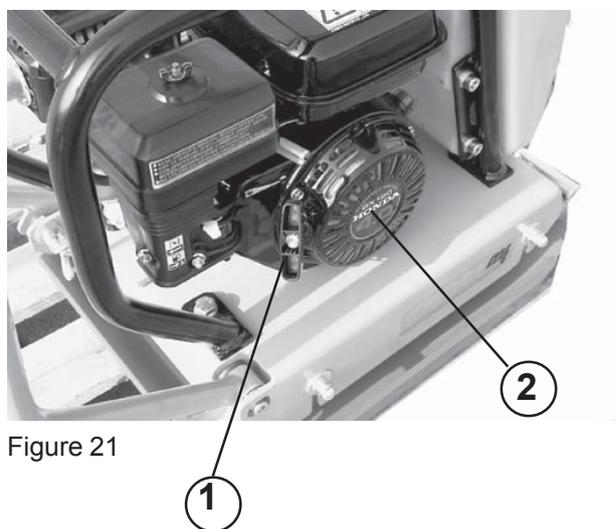


Figure 21

## 2.6 Compaction Work

- Start the soil compactor (refer to paragraph 2.5).

When the engine has warmed up:

- Push the engine speed adjusting lever (16/1) to the right side on the Robin engine and fully to the left side to full speed position (20/2) on the Honda engine.



### Caution!

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

During compaction work, the spring bar (22/2) must be unlocked!!



### 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).

- Use the handle (22/1) to steer the soil compactor into the desired direction.
- If installed, open the water stop cock (23/1).

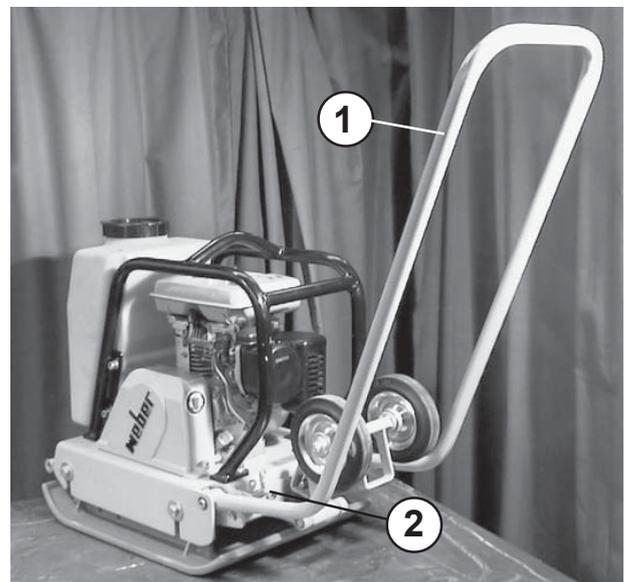


Figure 22

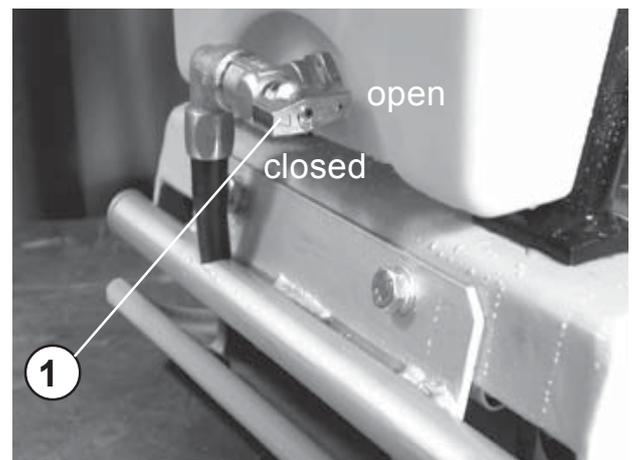


Figure 23

## 2.7 Putting the Compactor out of Operation

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

### **Warning!**

If the 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 the Robin Engine

- Push the engine speed adjusting lever (25/1) in the direction of the arrow to the right side and let the engine idle for some time.
- Close the fuel stop cock (25/2).
- Turn the stop button (26/1).
- If installed, close the water stop cock.



Figure 24

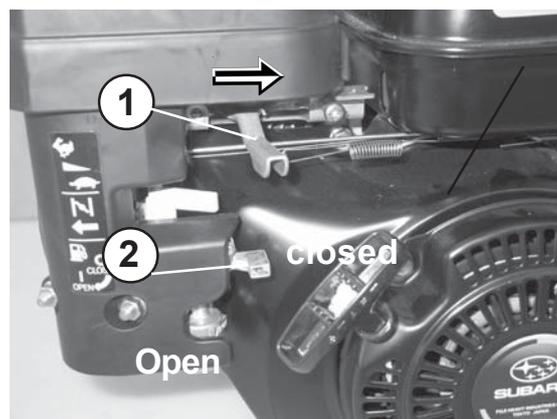


Figure 25

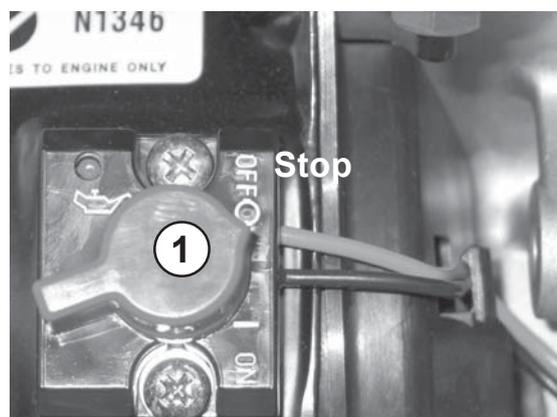


Figure 26

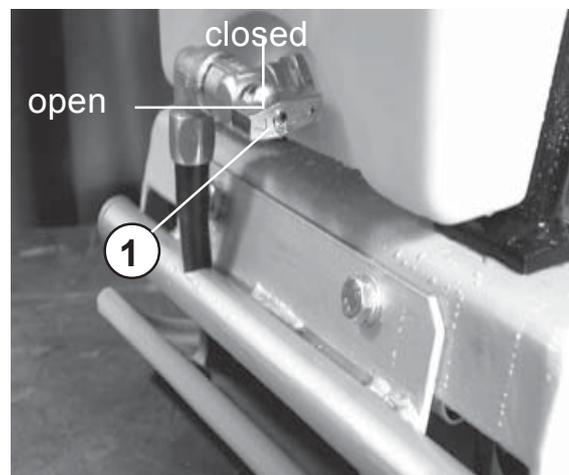


Figure 27

## 2.7.2 Stopping the Honda Engine

- Push the gas lever (28/1) to the right side and let the engine idle for some minutes.
- Push the gasoline cock (29/1) to the left side to the "OFF" position.
- Turn the stop cock (30/1) into the direction of "STOP".
- If installed, close the water stop cock (27/1).

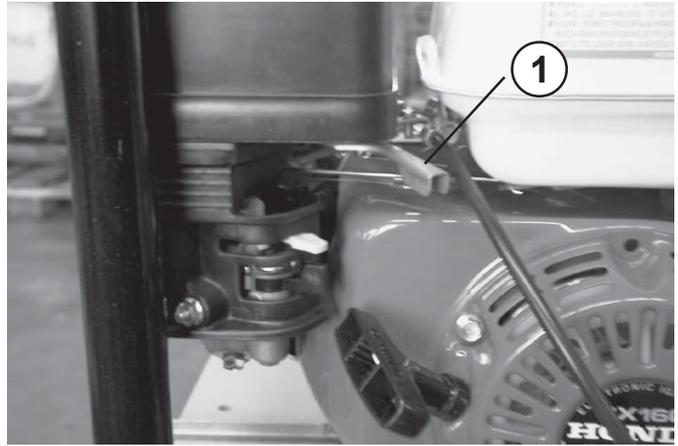


Figure 28



Figure 29

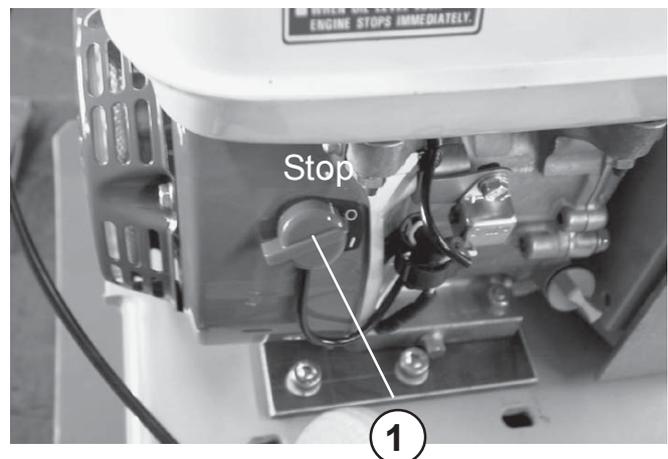


Figure 30

## **3 Maintenance**

### **3.1 Safety Precautions for Maintenance Work**

#### **Checks**

Depending upon the operating conditions, soil compactors must be made subject to an expert's check for operational safety when 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 compactor must be secured against unintentional movements.



Drained off consumables must be collected 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 ROBIN/HONDA for a detailed description of the maintenance work to be done on the engine.

## 3.2 Maintenance Survey

Any maintenance work which must be performed on the compactor is listed in two charts. The first chart (paragraph 3.2.1) indicates the initial maintenance work which has to be carried out once at a certain time after commissioning. The routine maintenance work indicated in the second chart (paragraph 3.2.2) has to be repeated at regular intervals.

Both charts have the same lay-out. The column "Maintenance Interval" indicates the time or the operating hours at which (after which) the maintenance work must be done.



If two time data are given, maintenance work has to be carried out at the time which occurs at first.

The column "Maintenance Item" refers to the assembly group on which the work indicated in the column "Maintenance Work" must be carried out.

The column "Remarks/Notes" contains cross-references on paragraphs of these operating and maintenance instructions or other documentation in which the maintenance work is described in detail.

### 3.2.1 Initial Maintenance

Maintenance Interval	Maintenance Item	Maintenance Work	Remarks/Notes
After the first 10 operating hours	Vibrator	- Check, and if necessary, increase the V-belt tension	# 3.3.4/5
After the first 20 operating hours	Engine	- Change the engine oil	# 3.3.1
	Vibrator	- Change the oil	# 3.3.6
	Whole machine	Check all screwed connections for tight seat, retighten them, if required	

### 3.2.2 Routine Maintenance

Maintenance Interval	Maintenance Item	Maintenance Work	Remarks/ Notes
Every 8 operating hours	Whole machine	- Check for visible damage, leaks etc.	
	Air filter	Clean and check the air filter element for damage, replace it if required	# 3.3.2
	Engine	- Check the engine oil level	# 2.4.2
Every 50 operating hours	Vibrator	- Check, and if required, increase the V-belt tension	# 3.3.4
	Engine	- Change the engine oil	# 3.3.1
		- Clean the spark plug - Clean the air filter	# 3.3.2
Every 100 operating hours	Whole machine	Check all screwed connections for tight seat, retighten them if necessary	
Every 200 operating hours	Engine	- Clean the fuel filter	# 3.3.2
	All bare parts	- Clean the spark plug and adjust the air gap - Apply a slight film of oil	Manual of the engine manufacturer
Every 500 operating hours	Vibrator	- Change the oil	# 3.3.6
	Engine	- Clean, and if required, adjust the carburettor - Clean the cylinder head - Adjust the valve clearance	Manual of the engine manufacturer
Every 2000 operating hours	Whole machine	- Check all groups for visible damage and wear - Remove dirt, old grease and rust	

### 3.3 Description of the Maintenance Work

#### 3.3.1 Changing/Adding 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 standing horizontally on the ground 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 oil filler screw/dipstick (31/1).
- Undo the oil drain screw (31/2) and completely drain the engine oil.
- Screw the oil drain screw (31/2) down again (use a new gasket).
- Add engine oil through the oil filler opening (31/1) according to the quantity chart (3.4).
- Check the oil quantity by means of the plug/dipstick (31/1) (refer to paragraph 2.4.1).
- Close the tank with the plug/dipstick (31/1) and check the system for tightness.

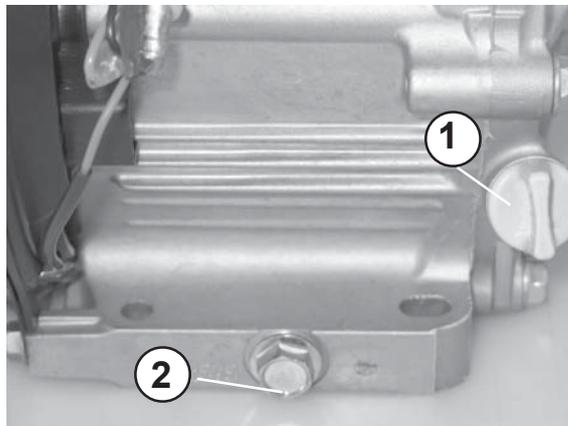


Figure 31

### 3.3.2 Cleaning/Replacing the Air Filter Cartridge

#### 3.3.2.1 CF 2 Robin

- Remove the wing nut (32/1) and the air filter cover (32/2).
- Pull out the air filter element (33/2) and the pre-cleaner (33/3).
- Wash the pre-cleaner (33/3) in benzine and let it dry.



#### Environment Hazard!

Dispose of the washing solution in an environmentally-friendly manner.

- Knock or blow the air filter element (33/1) 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 again.
- Fit the air filter cover (33/2) with the wing nut (32/1).

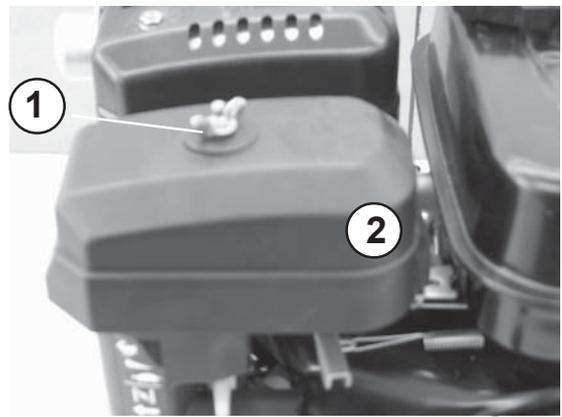


Figure 32

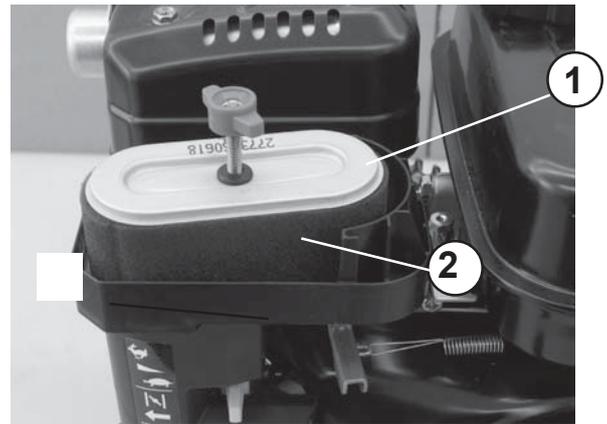


Figure 33

### 3.3.2.2 CF-2 Honda

- Remove the wing nut (34/2) and the air filter cover (34/1).
- Pull out the air filter element (35/1) and remove the foam pre-cleaner (35/2).
- Wash out the foam pre-cleaner (35/2) in benzine and let it dry.



#### Environment Hazard!

Dispose of the washing solution in an environmentally-friendly manner.

- Knock or blow the air filter element (35/1) 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 (36/1) again and fasten it with the thumb nut (36/2).
- Put the cover (34/1) on the air filter and fasten it with the thumb nut (34/2).

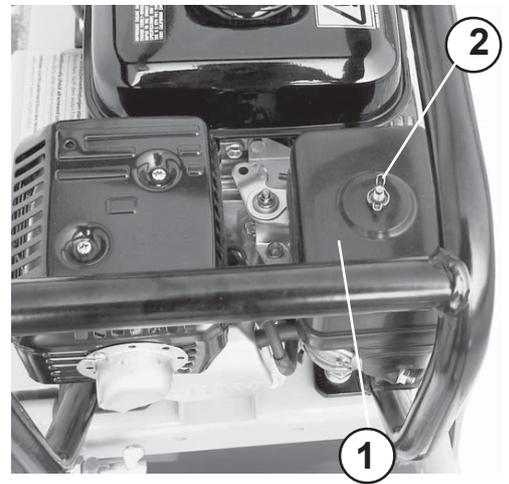


Figure 34

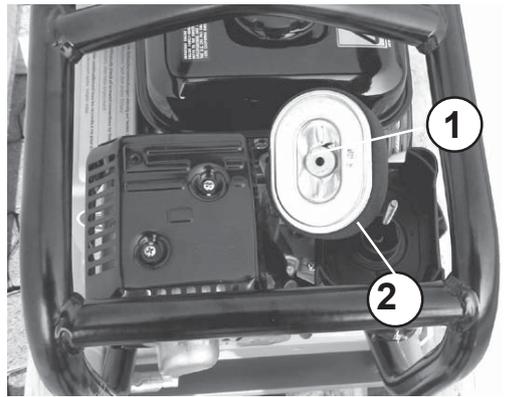


Figure 35



Figure 36

### 3.3.3 Cleaning/Replacing the Fuel Filter

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

#### 3.3.3.1 CF 2 Robin

- Take the cover off the tank (37/2).
- Take the strainer (37/1) out of the tank (37/2) and clean it.
- Reinstall in inverse order.

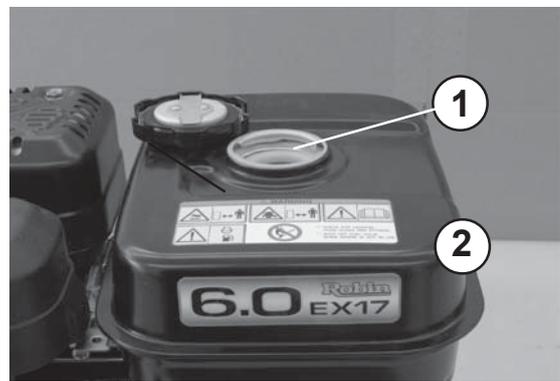


Figure 37

#### Environment Hazard!



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

- Undo the sight glass (38/1) beneath the fuel stop cock (38/2).
- Take the strainer out of the sight glass (38/1) and clean it.
- Reinstall in inverse order and check for tightness.

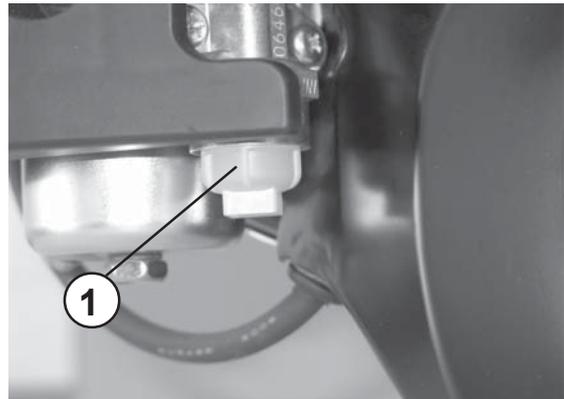


Figure 38

### 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.
- Remove the V-belt guard (39/1) by undoing the screws (39/2).
- Check the condition of the V-belt (40/1) (cracks, broken out flanks, wear).
- In case of excessive wear, replace the V-belt as described in paragraph 3.3.5.
- Apply a force of approx. 100 N and press the V-belt down as shown in figure 40. The V-belt's deflection should be approx. **10 mm**.

If the V-belt's tension is too low, proceed as follows:

- Tension the V-belt by means of the 4 fastening screws (41/1) of the engine bracket (41/2).
- Loosen the fastening screws and lift the engine bracket with a fitting lever.
- When the V-belt (40/1) has achieved the correct tension, retighten the fastening screws (41/1).



#### Caution!

Take care to properly fit the V-belt on the pulleys (40/2) (belt alignment).

- Fasten the V-belt guard (39/1) by means of the screws (39/2).

### 3.3.5 Replacing the V-Belt

- Remove the V-belt guard (39/1) by loosening the screws (39/2).
- Loosen the V-belt as described in paragraph 3.3.4 and remove the V-belt.
- Put on the new V-belt (pay attention to its length !!).



#### Caution!

Take care to properly align the belt, especially after repair work.

- Tension the V-belt as described in paragraph 3.3.4.

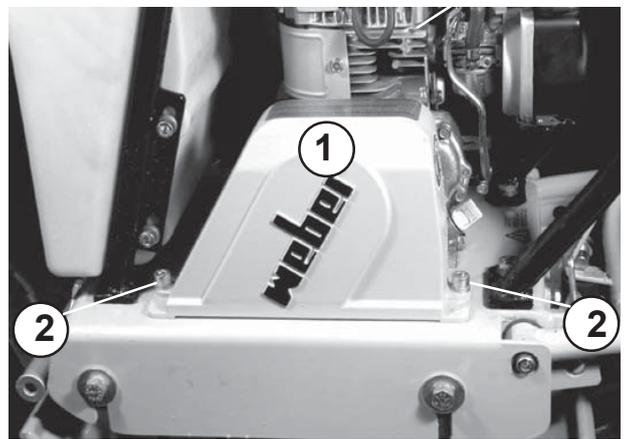


Figure 39

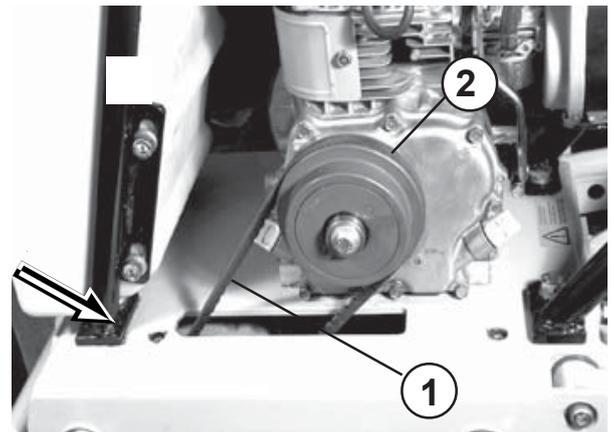


Figure 40

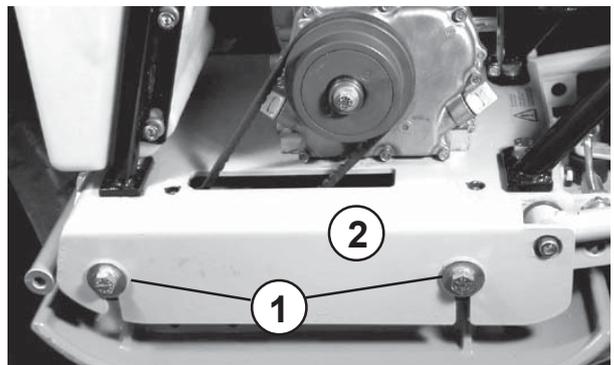


Figure 41

### 3.3.6 Changing the Vibrator Oil



#### Caution!

Change the oil at operating temperature only.

- Remove the V-belt guard (42/1).
- Loosen the V-belt (refer to paragraph 3.3.5).
- Undo the four screws (42/3) on both sides of the engine bracket (42/2).
- Take the engine bracket off the base plate.



#### Caution!

Thoroughly clean the oil drain/oil filler screw and the area around the drain filler opening.

- Put an appropriate drain pan under the outlet.
- Undo the oil filler and drain screw (43/1).
- Turn the base plate (42/2) with the vibrator (43/2) and let the oil escape into the drain pan.
- After the used oil has completely flown off, turn the base plate round.
- Pour engine oil in (refer to paragraph 3.4 for quantities and specifications).
- Screw the oil filler/drain screw (43/1) down.



#### Caution!

Take care that the contact surfaces of the oil filler and drain screw and of the vibrator housing are clean.



#### Environment Hazard!

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

- Put the engine bracket with the engine on the base plate.
- Put on and tension the V-belt as described in paragraph 3.3.4.
- Tighten the screws (42/3).
- Fit the V-belt guard (42/1) as described in paragraph 3.3.4.

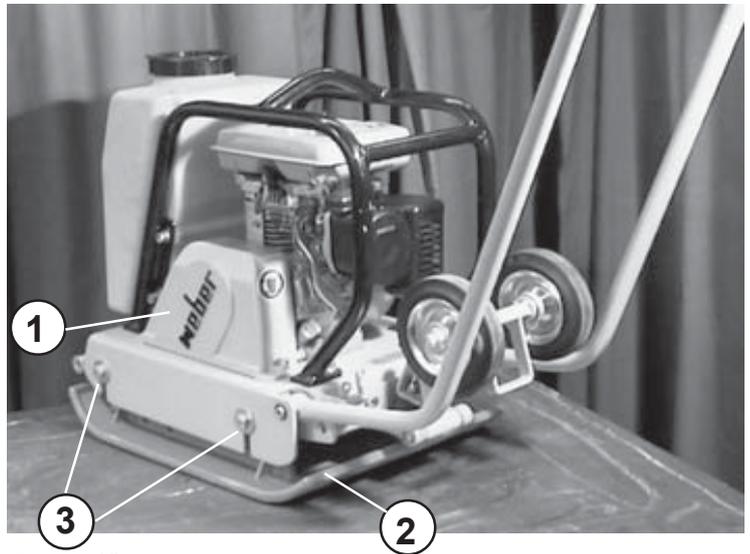


Figure 42

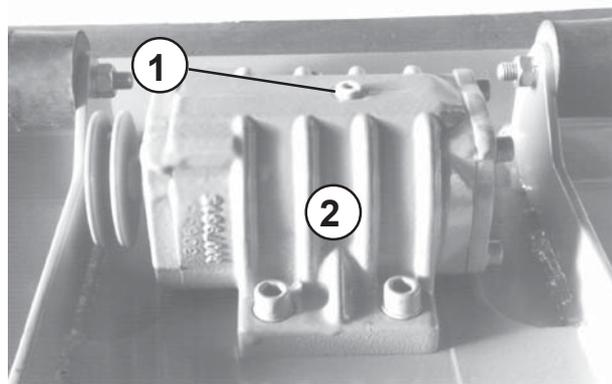


Figure 43

### 3.4 Consumables and Quantities

Assembly Group	Consumable		Quantity	Quantity
	Summer	Winter	CF-2R	CF-2 HD
	Quality			
<b>Engine</b> Engine oil	SAE 10 W 40 (-10 ~ + 50 °C) API - CD CE or SHPD or CCMC - D2 - D3 - PD1		0.6 l	0.6 l
<b>Fuel tank</b> Gasoline	Regular gasoline, unleaded		3.6 l	2.5 l
<b>Vibrator</b>	Engine oil 10 W 40 / 15 W 40		0.05 l	0.05 l
<b>Greasing points</b>	High-pressure grease (lithium saponified)  acc. to DIN 51825 - KPF2		as required	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).
- Eliminate the malfunction (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 the engine malfunctions.

The detailed description of the various controls and the references given in the column "Remarks/Notes" 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 rectified 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
<b>Soil compactor does not start</b>	Mistake in operating the unit	Perform the start 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
<b>No vibration, no or insufficient forward or reverse travel</b>	Defective vibrator V-belt	Replace the vibrator V-belt	# 3.3.5

## 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	Measures	Remarks
Whole soil compactor	<ul style="list-style-type: none"> <li>- Thoroughly clean</li> <li>- Check condition, fastenings and tightness</li> <li>- If required, have the failures ascertained repaired</li> </ul>	
Engine	<ul style="list-style-type: none"> <li>- Check the oil level, add oil if required</li> </ul>	# 2.4.2
All bare parts	<ul style="list-style-type: none"> <li>- Apply a slight film of oil</li> </ul>	
Fuel tank	<ul style="list-style-type: none"> <li>- Top the tank up to the lower edge of the filler neck with regular gasoline, unleaded</li> </ul>	# 2.4.1

### 5.2 Removing Machine Preservatives

Assembly Group	Measures	Remarks
Whole soil compactor	<ul style="list-style-type: none"> <li>- Thoroughly clean</li> <li>- Perform pre-start work</li> </ul>	# 2.4.







6

**Weber Maschinenteknik GmbH**

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