

OPERATING AND MAINTENANCE INSTRUCTIONS



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CF-1Robin EY15
Honda GX120



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Preface

These operating and maintenance instructions describe the safe operation of the **CF 1** 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 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 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
- asphalt
- no-slump concrete
- insulating materials/perlites.

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

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1. Technical Description

1.1 Illustration

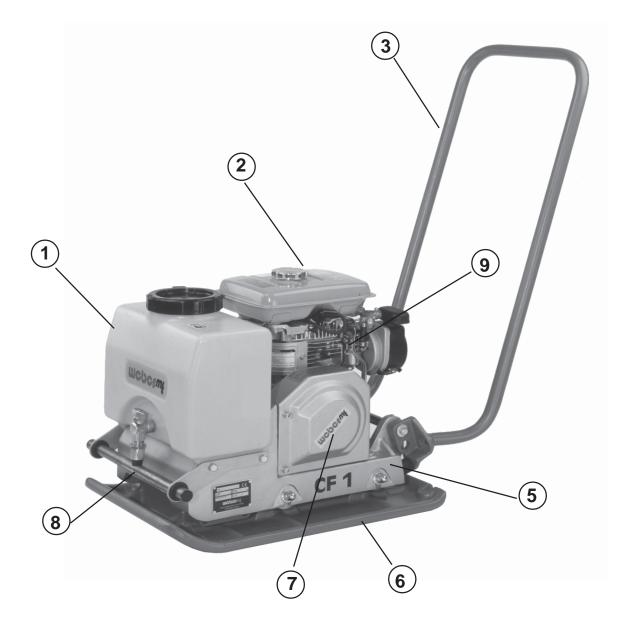


Figure 1 Overall View CF 1

- 1 Water tank (optional extra)
- 2 Fuel tank
- 3 Handle
- 4 Undercarriage (optional extra) (not shown)
- 5 Engine bracket

- 6 Base plate
- 7 V-belt guard
- 8 Water sprinkler system (optional extra)
- 9 EngineVulkollan plate (optional extra)(not shown)

1.2 Machine Description

The **CF 1** soil compactors are machines of the walk-behind type used for compaction work in road and trench construction.

Propulsion

The CF1 soil compactors are driven by a Robin gasoline engine (1/9) or a Honda gasoline engine.



Important!

Please refer to paragraph 1.3 (Specifications) for the 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. A bolt-on undercarriage (1/4) is offered to facilitate machine transports.

Operation

The soil compactor is started by means of a reversible starter (2/5).

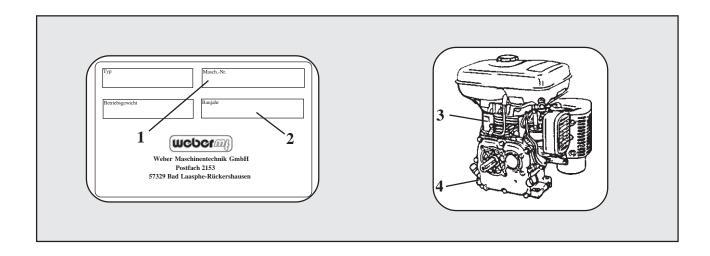
The machine is steered with the handle (1/3). The engine speed is directly controlled on the engine (refer to paragraph 2.5 and the following paragraphs).

1.3 Specifications

	CF 1 Robin	CF 1 Honda
Weight		
Operating weight CECE in kg	63	63
Dimensions		
Overall length (in mm)	970	970
Overall width (in mm)	400	400
Height with handle folded down (in mm)	460	430
Base plate length (in mm)	420	420
Contact area (in mm)	420 x 400	420 x 400
Propulsion		
Engine manufacturer	Robin	Honda
Туре	EY 15	GX 120
Maximum output according to B DIN 70020 (in kW (HP))	2.6 (3.5) at 3,600 rpm	2.9 (4.0) at 3,600 rpm
Type of combustion	4 stroke gasoline	4 stroke gasoline
Speed	3600	3600
Driving speed, forward (dependent on soil conditions (in m/min)	25	25
Gradeability (dependent on soil conditions, in %)	30	30
Depth compaction (in cm)	20	20
Performance (in m ² /h)	600	600
Vibration		
System	Single shaft vibrator	Single shaft vibrator
Mode of driving	Mechanical	Mechanical
Frequency (in Hz)	95	95
Centrifugal force (in kN)	10	10

	CF1 Robin	CF 1 Honda
Noise and Vibration Data*		
Sound pressure level LPA (at the operator's place, according to 2000/14/EG, in dB(A))	96	96
Sound power level LWA (according to 2000/14/EG, in dB(A))	104,4	104,4
Hand/arm vibration (weighted root mean square acceleration, at the handle, determined according to 2002/44/EG, Part 1, in m/s²)	5 - 10	5 - 10

^{*} 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.	3 TYPE
2 YEAR OF CONSTRUCTION	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 annulled.

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.



Do not operate the machine in the slip range of the clutch!

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, a special undercarriage (refer to paragraph 2.4.4) is available to facilitate machine transports. In addition, 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 catch (2/2).
- Put the crane hook (3/1) into the handle (3/2).



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!

2.2.2 Loading by Hand

- Put the soil compactor out of operation as described in paragraph 2.7.
- Lock the handle (2/1) by means of the spring catch (2/2).
- Two men are required to lift the soil compactor.

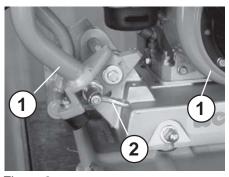


Figure 2

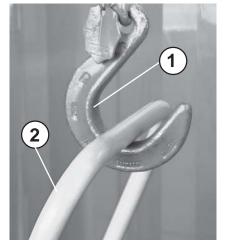


Figure 3

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 the machine is equipped with a water sprinkler system, check the water level, if required, add clean water (refer to paragraph 2.4.5).
- If required, fasten 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 cap (4/1) to open the fuel tank (4/2).



Caution!

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

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



Caution!

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 the fuel-soaked cloth in an environmentallyfriendly manner.

- Firmly close the fuel tank with the filler cap (4/1).

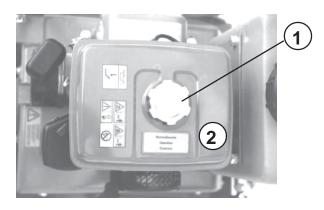


Figure 4

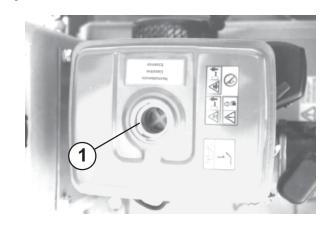


Figure 5

2.4.2 Checking the Engine Oil Level



Caution!

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

- Undo the oil filler plug with the oil dipstick (6/1), wipe it off 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, add engine oil according to paragraph 3.3.1 (refer to paragraph 3.4 for quantities and specifications).
- Firmly screw the oil dipstick down.

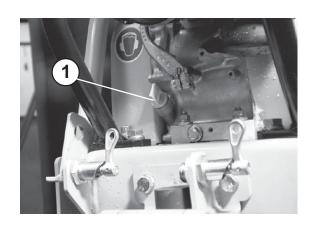


Figure 6



Figure 7

2.4.3 Fitting the Damper Plate

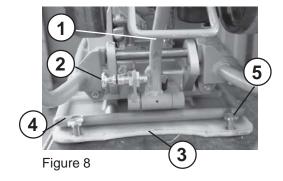
- Put the soil compactor out of operation as described in paragraph 2.7.
- Lock the undercarriage (8/1) by means of the spring catch (8/2) to prevent the undercarriage from turning down.



Danger!

If the undercarriage (8/1) is not secured by means of the spring catch (8/2), the undercarriage may turn down - risk of injury!

- Put the damper plate (8/3) beneath the base plate (8/4).
- Fix the damper plate (8/3) with the locking pin (8/5) at the back of the base plate (8/4).
- Fasten the damper plate with the iron bracket (9/1) and the screws (9/3) at the front of the base plate (9/2).



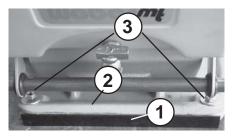


Figure 9

2.4.4 Fitting the Undercarriage

- Use the two screws (10/2) to fasten the undercarriage (10/1) at the engine bracket (10/3).
- Turn the undercarriage (10/1) down by loosening the locking lever (8/2).
- Push the handle (11/1) down and lock it by means of the spring catch (11/2).
- Use the handle (11/1) to tilt the machine to the front and swivel the undercarriage (12/1) beneath the base plate (12/2).
- In the operating position, the undercarriage (10/1) is folded upwards and locked in this position by means of the locking lever (8/2).



Caution!

During compaction, the spring catch (11/2) must be unlocked!!

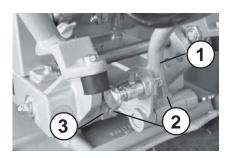


Figure 10

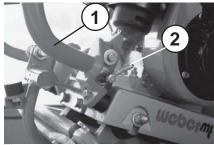


Figure 11

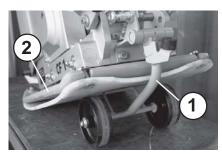


Figure 12

2.4.5 Fitting the Water Sprinkler System

- Fasten the sprinkler tube (13/1) to the water cock (13/2).
- Put the holders (13/3) on both sides of the sprinkler tube (13/1).
- Put the water tank (14/1) with the other components of the water sprinkler system (14/3) onto the engine bracket (14/2) and fasten them with the е S С r (14/4) on both sides.



Caution!

Top the water tank (14/1) up with clean water only, otherwise, the water sprinkler system (14/3) will clog up.

- The water tank can be filled by opening the cap (14/5).



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

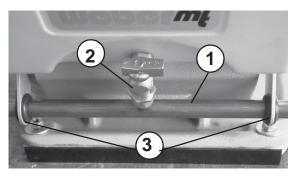


Figure 13

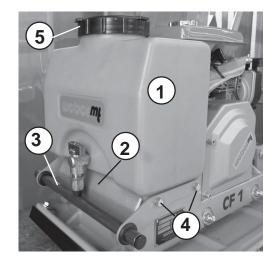


Figure14

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 15

2.5.1 Starting, Robin Engine

- Turn the stop button (15/1) into the "START" position.
- Push the speed adjusting lever (16/1) approx.
 1/3 to the right.
- Turn the fuel stop cock (17/1) into its 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).
 - 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).
- Slowly pull the handle (18/1) of the reversible starter (18/2) until a resistance is felt.
- Let the handle (18/1) recoil into its original position and then firmly pull the cable with both hands to start the engine.



If the engine should fail to start, repeat the starting procedure.

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

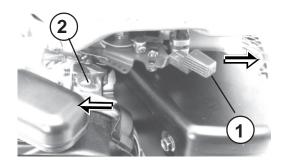


Figure 16

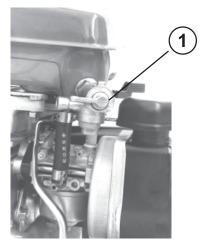


Figure 17

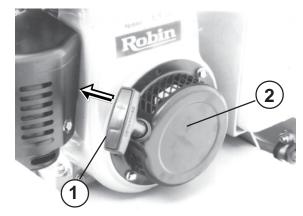


Figure 18

2.5.2 Starting, Honda Engine

- Turn the stop button (19/1) into the "START" position.
- Push the fuel cock (20/1) into the "ON" position.
- Push the speed adjusting lever (20/2) approx.
 1/3 to the left.
- In case of a cold engine and/or low ambient temperatures, totally close the choke (20/3). (Choke to the left).
- 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).
- Slowly pull the handle (21/1) of the reversible starter (21/2) until a resistance is felt.
- Let the handle (21/1) recoil into its original position and then firmly pull the cable with both hands to start the engine.



If the engine should fail to start, repeat the starting procedure.

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

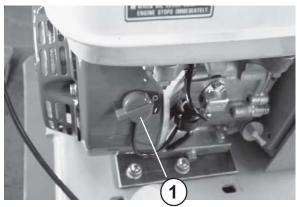
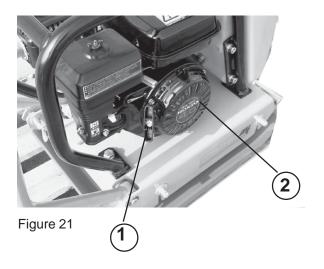


Figure 19



Figure 20



2.6 Compaction Work

- Put the soil compactor into operation (refer to paragraph 2.5).

As soon as the engine reaches its operating temperature:

 push the speed adjusting lever (16/1) to the right (Robin engine) or fully to the left (Honda engine (20/2)) in the full speed position.

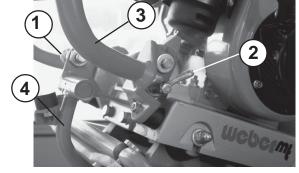


Figure 22



Caution!

Compaction work is only allowed at full engine speed, otherwise the centrifugal clutch may slip and cause increased wear. The spring catch (22/2) to lock the handle (22/3) must be unlocked. The undercarriage (22/4) must be folded upwards and must be locked by means of the spring catch (22/1).



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



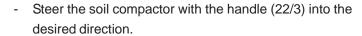
Danger!

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).



- If required open the water stop cock (23/1).

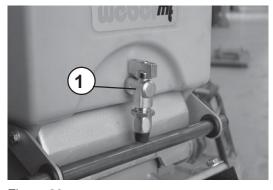


Figure 23

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.



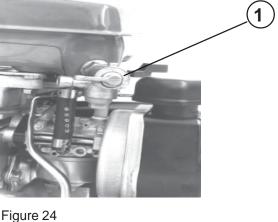
Warning!

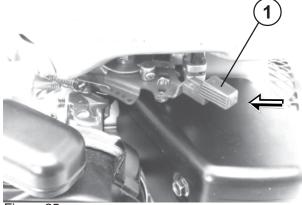
If the soil compactor causes an obstruction when being parked, precautionary measures must be taken in order to make the machine visible. If the machine is parked on traffic roads, the safety precautions required by the traffic regulations must be additionally observed.



Caution!

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





2.7.1 Stopping, Robin Engine

- Push the speed adjusting lever (25/1) to the left, into the direction of the arrow, and let the engine idle for some minutes.
- Close the fuel stop cock (24/1).
- Operate the stop switch (26/1).
- Close the water stop cock, if the machine is equipped accordingly.



Figure 26



Figure 27

2.7.2 Stopping, Honda Engine

- Push the speed adjusting lever (28/1) to the right and let the engine idle for some minutes.
- Push the fuel cock (28/2) to the left, into the "OFF" position.
- Turn the stop switch (29/1) into the "0" position.
- Close the water stop cock (27/1) if the machine is equipped accordingly.

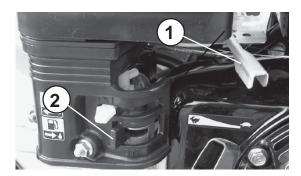


Figure 28

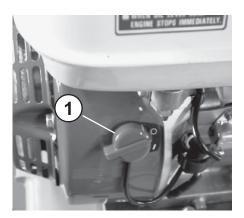


Figure 29

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 Manufacturers

Please refer to the annexed operation manual of the engine manufacturers 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 soil 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.

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" 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
After the first 10 operating hours	Vibrator	Check the V-belt's tension, if required, increase the 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 necessary	

3.2.2 Routine Maintenance

Maintenance Interval	Maintenance Item	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 50 operating hours	Vibrator	Check the V-belt tension, increase the tension if required	# 3.3.4
	Engine	- Change the engine oil	# 3.3.1
		Clean the air filter	# 3.3.2
		- Clean the spark plug	
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
		- Clean the spark plug and adjust the air gap	Manual of the engine manufacturer
	All bare parts	- Slightly oil	
Every 500 energing hours	Vibrator	- Change the oil	# 3.3.6
Every 500 operating hours	Engine	- Clean, and if necessary, adjust the carburettor	Manual of the engine manufacturer
		- Clean the cylinder head	
		- Adjust the valve clearance	
Every 2000 operating hours	Whole soil compactor	- Check all components for visible damage and wear	
		- Remove dirt, old grease and rust	

3.3 Description of 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 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 and dispose of the oil-soaked cloth in an environmentally-friendly manner.



Danger!

Danger of scalding because of hot oil.

- Undo the oil filler plug/dipstick (30/1).
- Undo the oil drain screw (30/2) and completely drain the engine oil.
- Screw the oil drain screw (30/2) down again (use a new gasket).
- Add engine oil according to the quantity chart (3.4) through the oil filler opening (30/1).
- Check the oil quantity by means of the plug/dipstick (30/1) (refer to paragraph 2.4.1).
- Screw the plug/dipstick (30/1) down and check tightness.

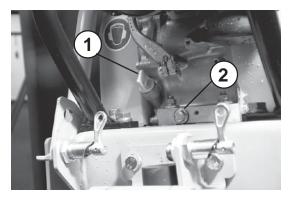


Figure 30

3.3.2 Cleaning/Replacing the Air Filter Cartridge

3.3.2.1 CF-1 Robin

- Undo the two clips (31/2) and remove the cover (31/1) from the air filter body.
- Pull out the air filter element (32/2) and the pre-cleaner (32/3)
- Wash the pre-cleaner (32/3) in benzine and let it dry.



Environment Hazard!

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

- Take the air filter element (32/2) out of the air filter body (32/1), and knock or blow the air filter element 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.
- Put the cover (31/1) on the air filter body and firmly fasten it by means of the two clips (31/2).

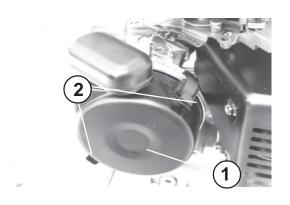


Figure 31

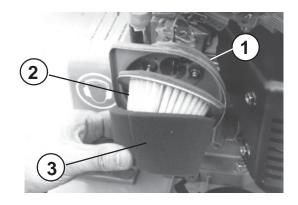


Figure 32

3.3.2.2 CF-1 Honda

- Remove the wing nut (33/2) and the air filter cover (33/1).
- Remove the wing nut (34/1).
- Pull out the air filter element (35/1) and the foam pre-cleaner (35/2).
- Wash 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 (34/2) again and fasten it with the wing nut (34/1).
- Fit the air filter cover (33/1) with the wing nut (33/2).

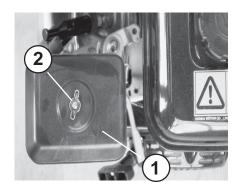


Figure 33

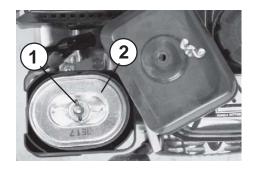


Figure 34

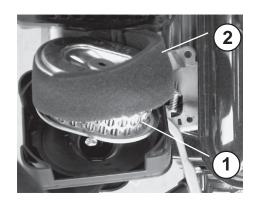


Figure 35

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-1 Robin

- Take the cap off the tank (36/2).
- Take the strainer (36/1) out of the tank (36/2) and clean it.
- Reinstall in inverse order.
- Undo the sight glass (37/1) beneath the fuel stop cock (37/2).



Environment Hazard!

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

- Take the strainer out of the sight glass (37/1) and clean it.
- Reinstall in inverse order and check tightness.

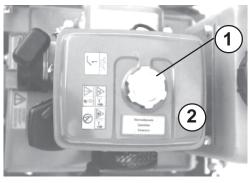


Figure 36

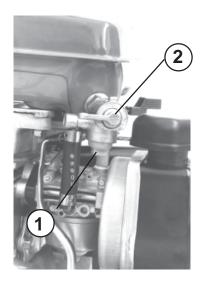
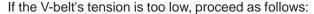


Figure 37

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 (38/1) by undoing the screws (38/2).
- Check the condition of the V-belt (39/1) (cracks, broken out flanks, wear).
- In case of excessive wear, replace the V-belt as described in paragaph 3.3.5.
- Apply a force of approx. 100 N and press the V-belt (39/1) down.
 The V-belt's deflection should be approx.10 mm.



- Loosen the 4 fastening screws (40/1) of the engine attachment.
- After having loosened the fastening screws (40/1), pull the engine (40/2) to the back in the long holes on the engine bracket.
- Retighten the fastening screws (40/1) when the V-belt (39/1) has achieved the required tension.



Caution!

Take care to properly fit the V-belt on the pulleys (39/2) (belt alignment).

- Fasten the V-belt guard (38/1) with the screws (38/2).

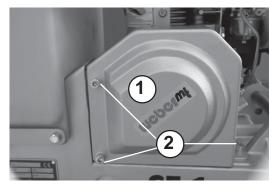


Figure 38

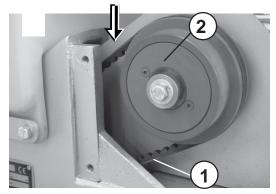


Figure 39

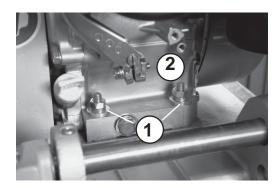


Figure 40

3.3.5 Replacing the V-Belt

- Remove the V-belt guard (38/1) by loosening the screws (38/2).
- Release the tension as described in paragraph 3.3.4 and remove the V-belt.
- Put on the new V-belt. (Take care to use a V-belt of the correct length!!)



Caution!

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

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

3.3.6 Changing the Vibrator Oil



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!



Caution!

Thouroughly clean the oil filler and drain plug and the area around the drain outlet/filling opening.



- Undo the oil drain/filler plug (41/1).
- Slightly tilt the machine to the right and let the oil escape into the drain pan.
- After having drained off all the used oil, slightly tilt the machine to the left.
- Top up with engine oil (refer to paragraph 3.4 for quantity and specifications).
- Screw the oil filler/drain plug (41/1) down.



Caution!

Take care that the contact surfaces of the oil drain/filler plug 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.

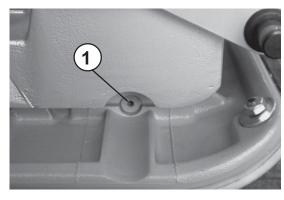


Figure 41

3.4 Consumables and Quantities

Assembly Group	Consumable Summer Winter Quality	Quantity CF-1	Quantity CF-1 HD
Engine			
Engine oil	SAE 10 W 40 (-10 ~ + 50 °C) API - CD CE or SHPD or CCMC - D2 - D3 - PD1	0.61	0.6 l
Fuel tenk			
Fuel tank Gasoline	Regular gasoline, unleaded	2.8	2.5
Vibrator	Engine oil 10 W 40 / 15 W 40	0.15 l	0.15
Greasing point	High-pressure grease (lithium-saponified) according 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).
- 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
No vibration/no or insufficient forward travel	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	Measure	Remarks
Whole soil compactor	- Thoroughly clean	
	- Check condition, fastenings and tightness	
	- Have any failures ascertained repaired	
Engine	- Check the oil level, if required add oil	# 2.4.2
All bare parts	- Apply a slight film of grease or oil	
Fuel tank	Add unleaded regular gasoline up to the bottom edge of the filler neck	# 2.4.1

5.2 Removing Machine Preservatives

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



6 Addresses, Weber Maschinentechnik GmbH

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