swepac

FBP-FBE
FBP-H
FBP-HP

USER MANUAL IN ORIGINAL

Dok: 101517-GB 1825

CONTENTS

Dok: 101517-GB 1825

SAFETY INSTRUCTIONS

To reduce the risk of serious injury or death to yourself or others read and understand the Safety and operating instruction before installing, operating, repairing, maintaining, or changing accessories on the machine.

Post this Safety and operating instruction at work locations, provide copies to employees, and make sure that everyone reads the Safety and operating instruction before operating or servicing the machine.

In addition, the operator or the operator's employer must assess the specific risks that maybe present as a result of each use of the machine.

Additional instructionst for the engine can be found in the manufacturer's engine manual.

Personal precautions and qualifications

Only qualified and trained persons may operate or maintain the machine.They must be physically able to handle the bulk, weight, and power of the machine. Always use your common sense and good judgement.

Personal protective equipment

Always use approved protective equipment. Operators and all other persons in the working area must wear protective equipment, including at a minimum:

- Protective helmet
- Hearing protection
- Impact resistant eye protection with side protection
- Respiratory protection when appropriate
- Protective gloves
- Proper protective boots
- Appropriate work overall or similar clothing (not loose-fitting) that covers your arms and legs.

Drugs, alcohol or medication

Drugs, alcohol or medication may impair your judgment and powers of concentration. Poor reactions and incorrect assessments can lead to severe accidents or death.

Never use the machine when you are tired or under the influence of drugs, alcohol or medication.

OPERATION, PRECAUTIONS

DANGER Explosion hazard

If a warm machine or exhaust pipe comes into contact with explosives, an explosion could occur. During operating with certain materials, sparks and ignition can occur. Explosions will lead to severe injuries or death.

Never operate the machine in any explosive environment.

Never use the machine near flammable materials, fumes or dust.

Make sure that there are no undetected sources of gas or explosives.

Avoid contact with the warm exhaust pipe or the bottom of the machine.

DANGER Fire hazard

If a fire starts in the machine, it can cause injury.

If possible use an ABE-class powder extinguisher, otherwise use a BE-type carbon dioxide fire extinguisher.

DANGER Fuel hazard

The fuel is flammable and fuel fumes can explode when ignited, causing serious injury or death.

Protect your skin from contact with the fuel.If fuel has penetrated the skin,consult a qualified health professional.

Never remove the filler cap, or fill the fueltank when the machine is hot.

Fill the fueltank outdoors or in a clean and well ventilated place, free from sparks and open flames. Fill the fuel tank at least ten meters (30 feet)from the place where the machine is to be used.

Release the filler cap slowly to let pressure escape.

Never over fill the fuel tank.

Make sure the filler cap is screwed on when the machine is used.

Avoid spilling fuel on the machine, wipe off any spilled fuel.

Check regularly for fuel leaks. Never use the machine if it is leaking fuel.

Never use the machine in the proximity of material that can generate sparks.Remove all hot or spark-generating devices before starting the machine.

Dok:101517-GB 1825

Never smoke when filling the fuel tank or when working with the machine or servicing it.

Only store fuel in a container that is specially constructed and approved for the purpose.

Consumed fuel and oil containers must be taken care of and returned to the retailer.

Never use your fingers to check for fluid leaks.

WARNING Unexpected movements

The machine is exposed to heavy strains during operation.If the machine breaks or gets stuck, there may be sudden and unexpected movement that can cause injuries.

Always inspect the machine prior to use. Never use the machine if you suspect that it is damaged.

Make sure that the handle is clean and free of grease and oil.

Keep your feet away from the machine.

Never sit on the machine.

Never strike or abuse the machine.

Pay attention and look at what you are doing.

WARNING Dust and fume hazard

Dusts and /or fumes generated or dispersed when using the machine may cause serious and permanent respiratory disease, illness, or other bodily injury. Some dusts and fumes created by compaction work contain substances known to cause respiratory disease, cancer, birth defects, or other reproductive harm.

Dust and fumes in the air can be invisible to the naked eye, so do not rely on eye sight to determine if there is dust or fumes are the air. To reduce the risk of exposure to dust and fumes, do all of the following:

Perform site-specific risk assessment. The risk assessment should include dust and fumes created by the use of the machine and the potential for disturbing existing dust.

Wear, maintain and correctly use respiratory protection as instructed by your employer and as required by occupational health and safety regulations. The respiratory protection must be effective for the type of substance at issue (and if applicable, approved by relevant governmental authority).

Work in a well ventilated area.

If the machine has an exhaust, direct the exhaust so as to reduce disturbance of dust in a dust filled environment.

Operate and maintain the machine as recommended in the operating and safety instructions.

Wear washable or disposable protective clothes at the worksite, and shower and change in to clean clothes before leaving the work site to reduce exposure of dust and fumes to your self, other persons, cars, homes, and other areas.

Avoid eating,drinking, and using tobacco products in areas where there is dust or fumes.

Wash your hands and face thoroughly as soon as possible upon leaving the exposure area,and always before eating, drinking, using tobacco products,or making contact with other persons.

Comply with all applicable laws and regultions, including occupational health and safety regulations.

Participate in air monitoring, medical examination programs, and health and safety training programs provided by your employer or trade organizations and in accordance with occupational health and safety regulations and recommendations. Consult with physicians experienced in relevant occupational medicine.

Work with your employer and trade organization to reduce dust and fume exposure at the work site and to reduce the risks. Effective health and safety programs, policies and procedures for protecting workers and others against harmful exposure to dust and fumes should be established and implemented based on advice from health and safety experts. Consult with experts.

DANGER Exhaust gas hazard

The exhaust gas from the machine's combustion engine contains carbon monoxide which is poisonous, and chemicals which cause cancer, birth defects, or other reproductive harm. Inhalation of exhaust fumes can cause serious injury, illness, or death.

Never inhale exhaust fumes.

Ensure good ventilation (extraction of air by fan if necessary).

Dok:101517-GB 1825

WARNING Projectiles

Failure of the work piece, of accessories, or even of the machine itself may generate high velocity projectiles. During operating, splinters or other particles from the compacted material may become projectiles and cause personal injury by striking the operator or other persons.To reduce these risk:

Use approved personal protective equipment and safety helmet, including impact resistant eye protection with side protection.

Make sure that no unauthorized persons trespass into the working zone.

Keep the work place free from foreign objects.

WARNING Rotating blades hazards

There is a risk of hands and feet getting caught by the rotating blades when the machine is running. This can cause personal injury.

Never place your hands or feet inside the protection ring when the machine is running

WARNING Motions hazards

When using the machine to perform work-related activities, you may experience discomfort in the hands, arms, shoulders, neck, or other parts of the body.

Adopt a comfortable posture whilst maintaining secure footing and avoiding awkward off-balanced postures.

Changing posture during extended tasks may help avoid discomfort and fatigue.

In case of persistent or recurring symptoms, consult a qualified health professional.

WARNING Vibrations hazards

Normal and proper use of the machine exposes the operator to vibration.Regular and frequent exposure to vibration may cause, contribute to, or aggravate injury or disorders to the operator'sf ingers, hands, wrists, arms, shoulders and/or nerves and blood supply or other bodyparts, including debilitating and/or permanent injuries or disorders that may develop gradually over periods of weeks, months, or years.Such injuries or disorders may include damage to the blood circulatory system, damage to the nervous system, damage to joints, and possibly damage to other body structures.

Operate and maintain the machine as recommended in these instructions, to prevent an unnecessary increase in vibration.

The following may help to reduce exposure to vibration for the operator:

Make sure that the machine is well-maintained and not worn out.

Immediately stop working if the machine suddenly starts to vibrate strongly. Before resuming the work, find and remove the cause of the increased vibrations.

Participate in health surveillance or monitoring, medical exams and training programs offered by your employer and when required by law.

When working in cold conditions wear warm clothing and keep hands warm and dry.

See the"Noise and vibration declaration statement"for the machine, including the declared vibration values. This information can be found on the page 9.

Dok:101517-GB 1825

WARNING Trapping hazards

There is a risk of neck ware, hair, gloves, and clothes getting dragged into or caught by rotating machineparts.This may cause choking, scalping, lacerations, or death.To reduce the risk:

Never grab or touch a rotating machine part.

Avoid wearing clothing, neck ware or gloves that may get caught.

Cover long hair with a hair net.

DANGER Electrical hazard

The machine is not electrically insulated. If the machine comes in to contact with electricity, serious injuries or death may result.

Never operate the machine near any electric wire or other source of electricity.

Make sure that there are no concealed wires or other sources of electricity in the working area.

DANGER Concealed object hazard

During operating, concealed wires and pipes constitute a danger that can result in serious injury.

Check the composition of the material before operating.

Watch out for concealed cables and pipes for example electricity, telephone, water, gas, and sewage lines.

If the machine seems to have hit a concealed object, switch off the machine immediately.

Make sure that there is no danger before continuing.

WARNING Involuntary start

Involuntary start of the machine may cause injury.

Keep your hands away from the start and stop device until you are ready to start the machine.

Learn how the machine is switched off in the event of an emergency.

WARNING Noise hazard

High noise levels can cause permanent and disablinghearing loss and other problems such as tinnitus(ringing, buzzing, whistling, or humming in the ears).To reduce risks and prevent an unnecessary increase in noise levels:

Risk assessment of these hazards and implementation of appropriate controls is essential.

Operate and maintain the machine as recommended in these instructions.

If the machine has a silencer, check that it is in place and in good working condition.

Always use hearing protection.

TRANSPORT, PRECAUTIONS

WARNING Loading and unloading hazard

When the machine is lifted by a crane and similar appliance, this can lead to injury.

Use marked lifting points.

Make sure that all lifting devices are dimensioned for the weight of the machine.

Never remain under or in the immediate vicinity of the machine.

MAINTENANCE, PRECAUTIONS

WARNING Unexpected start hazard

During maintenance or when changing blades on the machine, there is a risk that the engine backfires or that the machine unexpectedly starts. This applies especially when the engine is hot and if the engine power switch is in position ON.This can result in serious personal injury.

Always let the engine cool down.

Always turn the engine power switch to position OFF.

Always take the cap off the spark plug.

WARNING Unexpected start hazard

Any machine modification may result in bodily injuries to yourself or others.

Never modify the machine. Modified machines are not covered by warranty or product liability.

Always use original parts, insertion tools, and accessories.

Change damaged parts immediately.

Replace worn components in good time.

CAUTION High temperature

The machine's engine exhaust pipe, and bottom become hot during operation. Touching them can lead to burns.

Never touch a hot machine.

Never touch the bottom of the machine when its hot.

Wait until the engine, exhaust pipe, and bottom of the machine have cooled down before carrying out maintenance work.

STORAGE, PRECAUTIONS

Keep the machine in a safe place, out of the reach of children and locked up.

Dok:101517-GB 1825

To reduce the risk of serious injury or death to yourself or others, read the Safety instructions section found on the previous pages of this manual before operating the machine.

TECHNICAL DATA

FBP

Engine, petrol.....Honda GX 25
Engine output.....1,0 kW (1,1 HP)
Max output/R.P.M.....7000 rpm
Centrifugal force.....1500 N
Frequency.....9000 vib/min
Fuel tank volume.....0,5 liter
Weight, drive unit.....12,5kg

FBE

Electric motor.....230V, 1-fas
Effect.....500 W
Max R.P.M.....12000rpm
Centrifugal force.....1300 N
Frequency.....12000 vib/min
Weight, drive unit.....12 kg

Hand-arm vibration (m/s^2).....6,67
Acoustic pressure Lpa (dB).....113
Acoustic power Lwa (dB).....120

Dimensions

Length beam (m)	Weight beam (kg)
1,5	**4,6**
2,0	**6,2**
2,5	**7,8**
3,0	**9,3**

FBP-H

Engine, petrol.....Honda GX 25
Engine output.....1,0 kW (1,1 HP)
Max R.P.M.....7000 rpm
Centrifugal force.....1500 N
Frequency.....9000 vib/min
Fuel tank volume.....0,5 liter
Weight, drive unit.....12,5kg

Hand-arm vibration (m/s^2).....6,9
Acoustic pressure Lpa (dB).....113
Acoustic power Lwa (dB).....120

Dimensions

Length beam (m)	Weight beam (kg)
1,5	**4,6**
2,0	**6,2**
2,5	**7,8**
3,0	**9,3**
4,0	**12,5**

FBP-HP

Engine, petrol.....Honda GX 35
Engine output.....1,2 kW (1,6 HP)
Max output/R.P.M.....7000 rpm
Centrifugal force.....2000 N
Frequency.....9000 vib/min
Fuel tank volume.....0,7 liter
Weight, drive unit.....14,5kg

Hand-arm vibration (m/s^2).....4,03
Acoustic pressure Lpa (dB).....90,8
Acoustic power Lwa (dB).....105,8

Dimensions

Length beam (m)	Weight beam (kg)
2,0	**8,2**
3,0	**12,6**
4,0	**16,8**
5,0	**21,0**

FUEL and OIL RECOMMENDATIONS

	FBP / FBP-H / FBP-HP
Fuel type	Petrol (gasoline) Use unleaded petrol of standard quality
Engine oil	SAE 10W/30

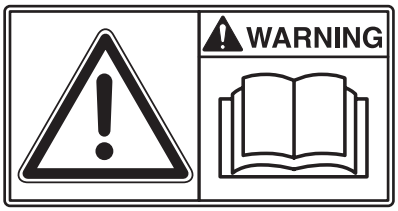
CHARACTERISTICS

Light screed for finishing the floors superficially. The main characteristic of this equipment is its low weight; only one person is needed for using it. The use of rail-guide is not necessary, this machine is suitable for working directly on the fresh concrete mass. The aluminium beam has a high resistance and a good flatness. On the screeds with petrol engine, vibration can be controlled with the accelerator lever.

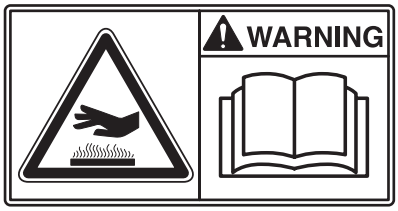
Dok:101517-GB 1825

SIGNS

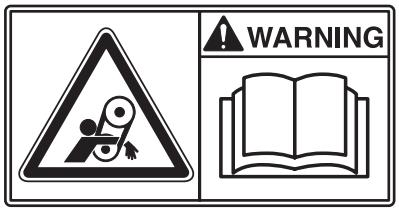
Warning Signs



Before use, carefully read the manual and its safety instructions so that you can handle the machine safely. Ensure that the manual is always accessible.



Engine and silencer: To avoid burns or discomfort, do not touch hot engine parts when the engine is on or when the machine has recently been used.

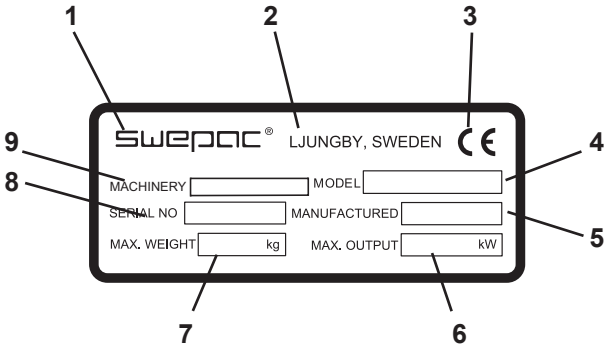


Belt drive: Keep hands, tools and other objects away from the belt drive when the machine is on to avoid injury and damage. See the safety instructions in the manual.

As the sound pressure level at the operator's ears exceeds 80 dB (A), ear protectors must be used when working with the machine to prevent hearing damage.

NOTE! Use only the machine´s lifting eye to lift the machine.

Machine Signs

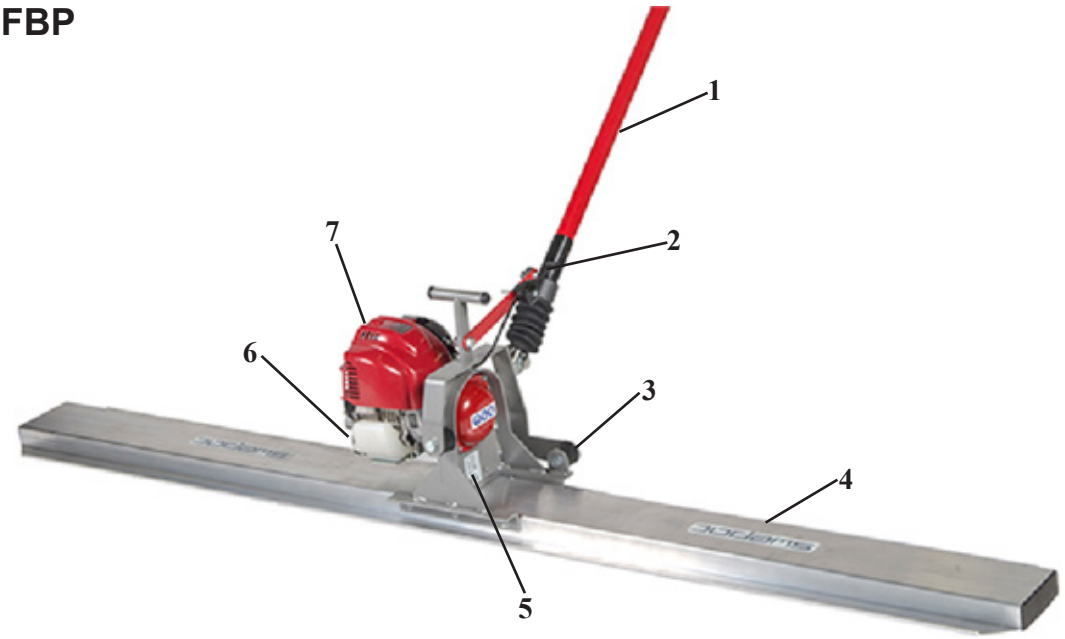


1. Manufacturer
2. Place, country of manufacture.
3. CE mark.
4. Model name.
5. Year of manufacture.
6. Max. engine power.
7. Max. weight.
8. Serial number.
9. Machine type

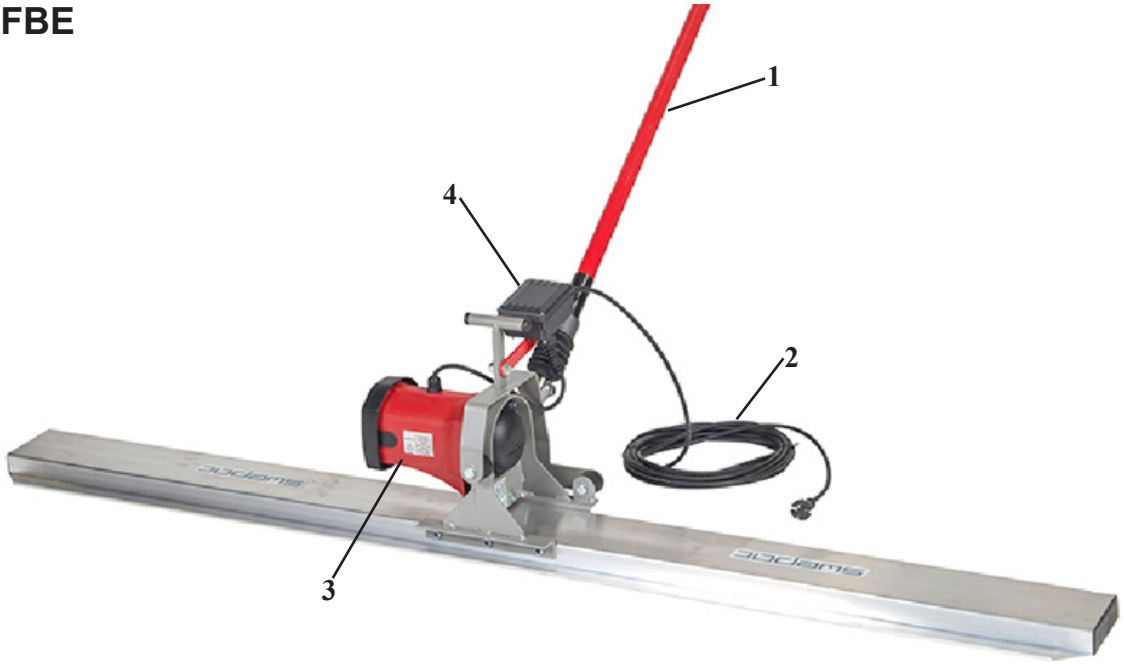
Dok:101517-GB 1825

DESCRIPTION

FBP



FBE



FBP
1. Handle
2. Accelerator lever
3. Shock abosorbers
4. Aluminium beam
5. Characteristics plate
6. Stop button
7. Engine

FBE
1. Handle
2. 10 m cable 2x1,5mm^2
3. Electric motor
4. ON-OFF switch and speed control

Dok:101517-GB 1825

DESCRIPTION

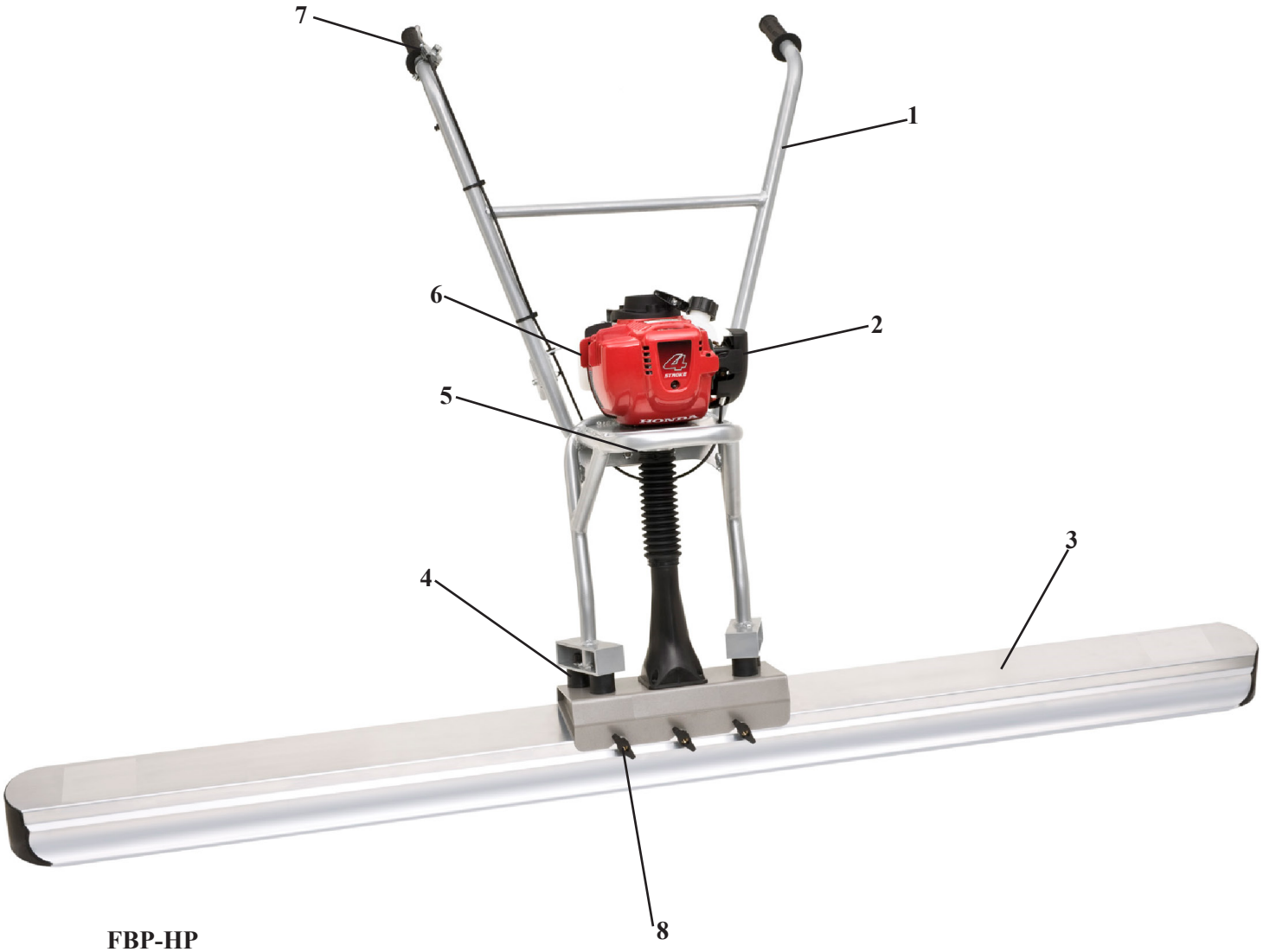
FBP-H

FBP-H
1. Handle
2. Silent-blocks
3. Aluminium beam
4. Engine
5. Characteristics plate
6. Stop button
7. Accelerator lever

Dok:101517-GB 1825

DESCRIPTION

FBP-HP



FBP-HP

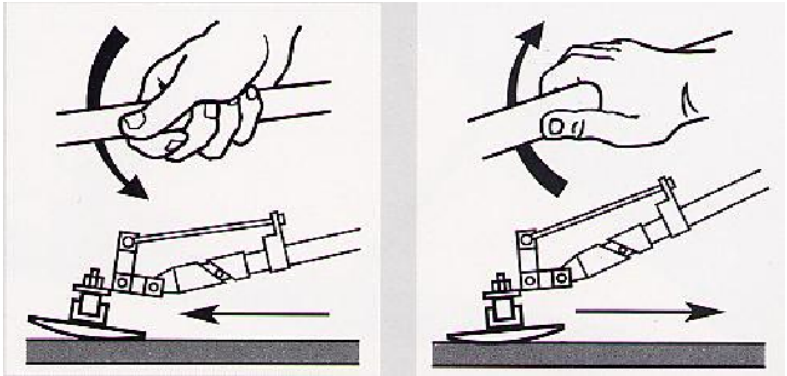
1. Handle
2. Stop button
3. Aluminium beam
4. Silent-blocks
5. Characteristics plate
6. Engine
7. Accelerator lever
8. Locking screw for the beam

Dok:101517-GB 1825

USAGE RECOMMENDATIONS

The screeds are used to the vibration and the finishing of the floors. This work can be made directly on the surface without guides. Thanks to its lightweight and to its mechanism producing a powerful vibration, the screed is ideal to smooth rapidly and easily the floors (from 6 to 18 cm thickness) depending on the concrete type.
In order to get a good finishing of the concrete surface, we recommend following these instructions:
1. - Before pouring the concrete mass on the structure, it is necessary to level properly the concrete mass. To get a right compaction of the concrete, you should use the vibrating pokers additionally. It's important to take references or levels out of the mass to see the level objective clearly. The marks of the feet and the tool disappear after the last pass of the screed. The vibration wave produced, reaches a depth of 18 cm depending on the type of concrete mass.
2. - When the mass is prepared, the screed is laid over the concrete mass with the motor running at the top speed and you must support the handle lightly in order to avoid the screed jumps over the surface and does not create "waves" and "marks" with edges. Pull and push constantly the screed. It is important to get a smooth surface. The screed must be in contact with the concrete. The screed must not show any resistance to pulling, it must slip over the concrete. The speed to push and pull the screed depends on the depth and the consistency of the mass.
3. - To judge the quality of the vibration, the marks of the feet and the beam must disappear. In case of the concrete is not really smooth, repeat the previous instruction.
4. - Then, a mixture called "milk" appears on the surface (this is a mixture of 3-4 mm thickness composed of water, concrete, and small sand particles).
5. - Water must evaporate quickly and the surface will become dull. The fine layer called "milk" is acting as a cinder paper for the below layers and avoids the sweating effect. The water stays in the below layers and the surface moistens.
6. - Several hours later, the concrete is ready for additional finishing operations. You can use a trowel (single or double ride-on-type) or re-vibration equipment (double roller unit with integrated vibrating system). These machines provide a higher resistance to wearing but are not required for all the types of floors.

The pictures below refers to the models **FBP** and **FBE.**
To achieve the best efficiency vibration on the concrete surface and make it flat in the same time, the angle of the beam can be changed. The intention is to not move the concrete to much.
This angle is created through a joint behind the engine that is connected to the handle tube(s). When the operator shall move it forward the tube is turned right, and the opposite when pull it backwards.



Dok:101517-GB 1825

USAGE CONDITIONS

TOOL USE AND CARE

USE clamps or other practical way to secure and support the work piece to a stable platform.
DO NOT FORCE the tool.
USE the correct tool for your application. The correct tool will do the work better and safer at the rate for which it is designed.
DO NOT USE the tool if the switch does not turn it on neither off.
DISCONNECT the plug from the power source before making any adjustments, changing accessories, or storing the tool.
STORE idle tools out of reach of children and other untrained persons.
MAINTAIN tool with care. KEEP cutting tools sharp and clean.
CHECK for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using again.
USE only accessories that are recommended by the manufacturer for your model.

OPERATION

GETTING STARTED

1; Before working, make sure that all the security devices are operating under normal conditions.

2; With petrol engine:

Read the engine manufacturer manual.
Do not work in rooms with scarce ventilation.
Make sure there is no flammable good near to the escape.
Check the petrol level in the reservoir (use always unleaded gas in 4 stroke engines).
Check the oil reservoir of the motor is full (see engine manual) in the 4-stroke engine (SAE 10W-30).

3; With electric motor (FBE):

Before working, switch the motor off with the handle switch.
Check the Current specifications of the power source.
Make sure the cables are in good condition.
Secure the power source is connected to earth.
In the case of using extension cables, read the next section “EXTENSION CABLES”.
4; Check all the bolts are well tighten.
5; Start the motor, regulate the speed with the accelerator (Petrol) until it reaches a good vibration.
6; Vibrate the floor by pulling the screed from the handle.
7; When the work is finished, always remove the fresh concrete that has been settling on the beams and the motor before it sticks to it.
8; When a defect or a malfunction has been detected, endangering the use of this machine or not, stop the work and make the correspondent maintenance to avoid any danger or bigger damage.

EXTENSION CABLES (Only machine with electric motor)

Do not use damaged cables.
Avoid heavy loads on cables.

SERVICE

Tool service MUST BE PERFORMED only by qualified repair personnel.
When servicing a tool, USE only identical replacement parts.
FOLLOW instructions in the Maintenance section of this manual.

Dok:101517-GB 1825

MAINTENANCE

PERIODIC MAINTENANCE

Maintenance with petrol engine:

1. - Daily (8 hours).
Clean the engine and the beams, check the bolts & nuts, check and fill the engine reservoir with oil.
2. - Weekly (50 hours).
Change the motor oil (first 20 hours), clean the sparking plugs and the air filter.
3. - Monthly (200 hours).
Clean the oil filter, clean and adjust the sparks plugs.
4. - Every 250 hours. Clean and set the carburettor, clean the cylinder's head, set the valves.
5. - Always use original parts by every maintenance operation.
6. - The safety fittings have to be checked after every maintenance.
7. - Every 12 months or more frequently, the screed has to be sent to an authorized workshop for service according to the intensity of the usage.
8. - Do not fill the fuel tank while smoking or near any other potential source of danger.
Lock the petrol admission key when filling, use unleaded gas, clean the gas spelt.
9. - Idle speed of the motor must not exceed 3.000 rpm. (standard set).
By every maintenance operation, the idle speed of the engine has to be checked and adjusted at 3.000 rpm.
See the engine manual to set the engine speed, starting and stopping.

Maintenance with electric motor (FBE):

1. - The operating of the electric parts must be done by a specialist.
2. - During the maintenance, make sure that the device is disconnected from the power source.
3. - Always use original parts by every maintenance operation.
4. - The bearings of the motor do not need a periodic maintenance.
5. - Inspect the plug, the socket as well as the cables every 100 hours.
6. - Clean periodically the housing of the motor to prevent an overheating. Don't wash the machine with electric motor with a high pressure water hose.
7. - Clean weekly the air inlet filter (or when 50 hours working) removing the screws of the housing cover 48402.
8. - On screeds check periodically the condition of the brushes and replace them when 120 hours working
9. - The safety fittings have to be checked after every maintenance.
10. - Every 12 months or more frequently the screed has to be sent to the distributor or service workshop for service according to the intensity of the usage.
Re-screw the nuts and bolts daily.

Dok: 101517-GB 1825

LOCATING MALFUNCTIONS

PROBLEM	CAUSES/SOLUTIONS
The motor doesn't work	Check the gas level.
	Check the gas admission key is open.
	Check the de choke position (gas).
	Check the power source (electric).
	Check the brushes condition (electric Turbo)
	Check the cables, the switch and the plug (electric).
The screed doesn't vibrate	Check the engine oil level.
	Check the exciter's transmission.
The electric motor is overheating	Clean the air ventilation (inlet and outlet).
	Check the power supply type.

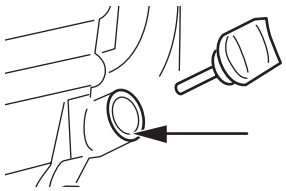
DAILY CHECKS

Fuel Check

Check that there is fuel in the tank. Fill up if necessary.

Engine Oil Level Check

Check the oil level in the crankcase every day. The oil must reach the edge of the filling hole when the machine is on a level surface.



Oil/Fuel Leakage

Check every day that the engine is not leaking oil or fuel. If a leak is discovered, the machine may not be operated until the fault has been remedied.

Regular Check

The air filter must be checked at least once every working week. When working in dusty conditions, check daily.

Dok:101517-GB 1825

STORAGE

Always store the screed in a clean and dry area when not used for a long period of time

TRANSPORTATION

Make sure the screed won't suffer any ripping or shock that could cause any damage.

DISPOSAL

A used machine must be treated and disposed in such a way that the greatest possible portion of the material can be recycled and any negative influence on the environment is kept as low as possible, and inaccordance with local restrictions.

Before a fuel driven machine is deposited it must be emptied and cleaned of all oil and fuel. Remaining oil and fuel must be dealt with in a way that does not adversely affect the environment.

Always send used filters, drained oil and fuel remnants to environmentally correct disposal.

Dok: 101517-GB 1825

NOTES

Dok: 101517-GB 1825

NOTES

Dok: 101517-GB 1825

EC-declaration of conformity

Manufacturer

Swepac AB
Blockvägen 3
34132 Ljungby

1. Category: Screed

2. Type: FBP-FBE
FBP-H
FBP-HP

3. Engine power: FBP.....1,0 kW
FBE.....500W
FBP.....1,0 kW
FBP-HP.....1,2 kW

The product complies with the following directives:

2006 / 42 / EG

2000 / 14 /EG

2004 / 108 / EG

EN 500-1

EN 500-4

Technical documentation held by:
Swepac AB, Blockvägen 3 SE-34132 Ljungby
Hans Holmlund / Product Manager

Dok:101517-GB 1825

swepac

SWEPAC AB

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