-Translation of the original operating instructions-

OPERATING INSTRUCTIONS

FBS 105

Order no. 619002 2022-03

Schwamborn
...mit uns machen Sie Boden gut!

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1 SAFETY

1.1 Manual

This manual guarantees the safe and efficient use of the machine. This manual is part of the machine and has to always be kept near the machine and be accessible for the operating personnel at all times.

The operating personnel have to have carefully read and understood this manual before any work commences. Prerequisite for safe working is the compliance with all the safety and handling instructions in this manual.

Furthermore, the local accident prevention regulations and the general safety conditions for the use of the machine are applicable.

Illustrations in this manual are for the purpose of explanation and may differ from the actual design of the machine.

When passing the machine on to third parties this manual must be included.

All of the instructions and technical specifications in this manual have been written in compliance with current technical norms and regulations together with our many years of knowledge and experience.

In the following cases the manufacturer does not accept any liability:

Non-compliance with these instructions
Improper use
Operation by untrained personnel
Unauthorized modifications
Technical modifications
Use of unauthorized replacement parts

1.2 Explanations of symbols and instructions

Safety instructions in this manual are marked by symbols. Instructions are introduced by signal words which express the scale of the hazard.

It is essential that these instructions are adhered to and the machine is operated with caution to avoid accidents, injuries and material damage.

WARNING!
...indicates a potentially dangerous situation which if not avoided can lead to death or serious injuries.

CAUTION!
...indicates a potentially dangerous situation which if not avoided can lead to minor or light injuries.

PROHIBITION!
...indicates an immediate dangerous situation which if not avoided can lead to death or serious injuries.

ADVICE!
...emphasizes tips and recommendations as well as information for efficient and failure-free operation.

1 SAFETY

1.3 Intended use

The machine is used for the removal of all sorts of floor coverings for example UPVC, linoleum, carpets, rubber floors as well as tiles, coatings, adhesives and parquet flooring!
NOT suitable as a tractor or for demolition work of e.g. screed.

The machine may only be used for the proper use. This also includes compliance with the operating, maintenance and servicing conditions prescribed by the manufacturer!
Any use beyond the proper use or any other use is considered as misuse.

WARNING! Danger due to misuse!
Misuse can lead to dangerous situations.
- Operation outside the specified limit values of the technical data.
- Bypassing or overriding of safety installations.
- Remodelling, refitting or changing the construction or individual parts with the intention to alter the area of application or use of the machine.
- Use of the machine when not in perfect technical condition.
- Use of the machine in potentially explosive areas.

Claims of any kind for damage due to improper use are excluded.

1.4 Owner's obligations

The owner is a person who operates the machine for commercial or economic use or leaves it to a third person for use/application and during its use carries the legal responsibility for the protection of the user, personnel or a third person. The machine is used in the commercial sector. The owner of the machine is therefore obliged to comply with the legal responsibilities for health and safety.

The local regulations of the place of use as well as accident prevention measures of the local trade association must be adhered to.
It applies in particular that the owner:
- is informed about current health and safety regulations.
- determines during a risk assessment additional hazards which occur through specific working conditions on the operating site of the machine.
- implements in a job control statement the necessary compliance requirements for the operation of the machine on the operating site.
- regularly examines during the entire operating time that the operating instructions comply with the current status of regulations.
- that the operating instructions-if necessary- are adjusted to new regulations, standards and conditions of use.
- clearly regulates the responsibilities for the installation, operation, maintenance and cleaning of the machine.
- ensures that all staff working near or with the machine have read and understood the operating instructions. Furthermore he or she has to train all personnel in regular intervals and inform them about possible hazards.

Additionally the owner is responsible for:
- the impeccable condition of the machine.
- the servicing of the machine in the recommended maintenance intervals.
- the regular inspection of all safety installations ensuring that they are complete and in working order.

1 SAFETY

1.5 Operating personnel

QUALIFICATION
The different tasks described in this manual request various qualifications from the persons dealing with the machine.

WARNING! Danger for persons with insufficient qualifications!
Insufficiently qualified persons can not judge the risks when operating the machine and put themselves and others at risk of serious injuries or death.
- All work must only be performed by qualified personnel.
- Insufficiently qualified persons must be kept away from the operating area.

In this manual the necessary qualifications for the persons and the different tasks are listed:

OPERATOR:
the operator has been instructed by the owner and been given the assigned tasks and has been informed about the possible hazards in case of improper behaviour. Tasks which go beyond regular operation tasks can only be executed by the operator if listed in this manual and have been explicitly authorized by the owner.

TRAINED PERSONS
have been instructed by the owner and been given the assigned tasks and have been informed about the possible hazards in case of improper behaviour.

QUALIFIED PERSONNEL
Qualified personnel is able to carry out assigned tasks and recognize and avoid independently possible hazards given their specialist training, knowledge and experience as well as their knowledge of relevant norms and regulations.

MANUFACTURER
Certain work can only be carried out by trained personnel of the manufacturer. Other personnel are not authorized to carry out this work. Please contact our customer service for required work.

UNAUTHORIZED PERSONS
WARNING! Danger for unauthorized persons in the operating area!
– Unauthorized persons have to be kept away from the operating area.
– If in doubt remove persons from the operating area.
– Interrupt the work as long as unauthorized persons are in the operating area.

INSTRUCTION
The owner of the machine has to regularly instruct all personnel.
For better documentation an instruction protocol with the following minimum content has to be kept:
- date, content of the instruction
- name of the instructor
- signatures of the instructed and instructor

1 SAFETY

1.6 Personal protective equipment

When operating the machine personal protective clothing has to be worn in order to minimize health hazards.

The following protective clothing has to be worn by anybody in the operating area.

Protective work clothing.
Wear appropriate work clothing! Work clothing should fit tightly and loose garments should be avoided since they can get caught in the machine.

Protective gloves
Protective gloves to protect your hands when changing blades.

Ear protection + Protective goggles
Ear protection offers you protection from hearing damage through noise.
Protective goggles protect your eyes from floor covering flying around.

Safety shoes
Safety shoes protect your feet from bruising and from sharp objects and from slipping on slippery ground.

Respirator mask
Dust can lead to breathing complaints. When working for a long time or on dusty ground a respirator mask has to be worn to protect your respiratory tract from dust and from small particles.

1.7 Signage

WARNING! Danger with illegible signage!
With time labels and signage can become dirty or illegible so that hazards can´t be recognized and necessary instructions adhered to. This means an increased risk of injury.

- Keep all safety, warning and operating instructions always in legible condition.
- Damaged labels or signage has to be replaced immediately.

The following symbols and signs can be found in the operating area.
They refer to the immediate area where they have been placed.

WARNINGS
Sharp blade, wear protective gloves when changing blades!

COMMANDMENTS
- Read and understand the instructions
- Wear ear protection and safety goggles
- Wear appropriate work clothes
- Wear safety shoes

1.8 Safety installations

WARNING! Danger through defective safety installations!
Defective or suspended safety installations can cause severe injuries and death.
- Before work can start all safety installations have to be inspected to see whether they are functioning properly and have been correctly installed.
- Never suspend safety methods or override them.
- Make sure that all safety methods are always accessible.

1 SAFETY

1.9 Occupational safety and special risks

The following paragraph explains residual risks which might be present even if the machine is used correctly.

To reduce the risk for persons and material damages and to avoid dangerous situations the listed safety information in this paragraph and in the remaining manual has to be adhered to.

Improper use

WARNING! Danger through improper use!

Make sure:
– Only use machine when in perfect technical condition. Defects are to be resolved immediately.
– Modifications to the machine are not permitted and can impair safety.
– Before regular maintenance, cleaning and repairs the power has to be switched off and secured against unintentional start-up (switch off drives).
– Never override or switch off safety installations.
– All work on the machine and/or its electrical components has to be carried out by trained personnel.
– Repair or maintenance work must only be carried out when the machine is switched off. The machine has to be secured against unintentional start-up.

Axis movements

WARNING! Danger of injury through axis movements!

Collision of persons with the machine or its tools can lead to severe injury.

Make sure:
– Unauthorized persons in the operating area are strictly prohibited!
– Safety installations and/or functions must not be switched off or overridden.
- Do not hold any body parts between moving components.
- Blades must only be changed when the machine is idle.
- Wear personal protective gear in the operating area.
- Assistants must always keep a safety distance of a minimum radius of 1 meter from the machine.

Removed materials

WARNING! Injuries through removed materials!
The removed floorcovering can fly around or be thrown around unexpectedly and cause serious injury.

Make sure:
- Wear face protection or fully closed and tight fitting goggles, protective clothing, protective gloves and safety shoes.
- Seek medical attention immediately if particles have entered your eyes.
- Assistants must always keep a safety distance of a minimum radius of 1 meter from the machine.

1 SAFETY

1.9 Occupational safety and special risks

Sharp edges and sharp corners

CAUTION! Danger of injury from sharp edges and sharp corners!
Sharp edges and sharp corners can scratch and cut into your skin.

Make sure:
- Be careful when working near sharp edges and sharp corners.
- Wear protective gloves when in doubt.

Insertion tools (knifes/blades)

CAUTION! Danger of injury through improper use of tools!
Improper use of tools can cause bruising and cuts.

Make sure:
- Use tools carefully and as intended.
- Consider the weight of tools in transport.
- Wear protective gloves and safety shoes.

Working environment

CAUTION! Avoid dangerous conditions!

Do not operate machine in rain, stormy surroundings, humidity or wet areas or in explosive environments (gaseous vapours, dust or flammable materials).
Remove materials and debris which can be ignited by sparks.

Keep your working area clean and well lit.
Untidy and dark working areas increase the danger of accidents.

Keep spectators away from the working area.
Children and spectators must keep a safety distance from the working area in order not to distract the driver and not to come in contact with the machine.
The driver must always be aware of who is nearby.

Also protect other persons in the working area.
Provide safety screens and protective shields to protect others from the movement of the machine and debris.

Always be aware of the position of your colleagues when the machine is in operation. Close off working area.
Colleagues must never be in front or behind the running machine. Non-compliance can lead to serious injuries or death.

Keep working area clean and tidy! Unsecured, scattered components and tools are a potential source for accidents

1 SAFETY

1.9 Occupational safety and special risks

Start-up and operation

WARNING! Danger of injury through improper start-up and operation Improper start-up and operation can lead to personal injury or material damage.

Make sure:
– Start-up and operation can only be executed by sufficiently trained personnel, authorized and instructed by the owner of the machine.
– Before work commences all safety installations have to be inspected to check whether they are functioning properly and have been correctly installed.
– Keep working area tidy and clean! Unsecured, scattered components and tools are a potential source for accidents.

WARNING! Non-stop work; Malpositions, vibrations and machine movements cause pain and fatigue

Make sure:
- observe regular breaks.

Maintenance and troubleshooting

WARNING! Danger of injury through improper maintenance and troubleshooting! Improper maintenance and troubleshooting can lead to severe personal injury and material damage.

Make sure:
– Any maintenance work and troubleshooting must only be carried out by sufficiently qualified and instructed personnel.
– Secure machine from unintentional start-up. Switch off drive!
– Provide sufficient space before starting maintenance work.
– Keep working area clean and tidy! Unsecured, scattered components and tools are a potential source for accidents.

When components need to be replaced:
- Contact manufacturer or authorized representative.

1 SAFETY

1.9 Occupational safety and special risks

ELECTRICAL CONNECTIONS / ELECTRICAL COMPONENTS

WARNING! Risk of death due to electric current!

Only connect the machine to the electrical values stated on the rating plate. Check before startup.

Only connect the machine to an approved power cable and plug.
For Europe, approved power cables and plugs must be used.
Cable Type H07BQ-F3G2,5 length max 10 m, 230ASP/Kupp.
Using the machine with cables of insufficient average and / or excessive length may result in personal injury or property damage.

Have electrical equipment such as a relay, protective circuit or power line checked by an authorized electrician. If the circuit breaker trips or trips repeatedly, it can cause electrocution.

Never work with a damaged cable or plug. Worn or damaged cables or plugs should be replaced by an electrician or authorized service personnel.

Do not use the machine if the cable is damaged. Do not pull on the cable to move the machine. Using the machine with a damaged cable can cause an electric shock.

Never switch off the earthing cable or render it unusable. Using the machine in a non-earthed circuit may result in electrocution. Consult an electrician if the grounding wire is missing or if you believe that the circuit does not have adequate grounding.

The machine may only be operated on circuits with a residual current device.

When working on the machine always unplug the power plug!
Maintenance, replacement or adjustment of the hydraulic fluid or components may result in personal injury to the operator and / or bystanders when the machine is plugged into the electrical outlet.

Work on electrical components of the machine may only be carried out by a qualified electrician.

Keep the cable away from the lower part of the machine so that the blade does not come into contact with it. Always keep the cable raised above the machine.

Driving over or damaging the cable through the machine may result in electric shock.

The machine is only suitable for indoor use. Risk of electric shock.
Do not expose the machine to water or rain.

2 PRODUCT INFORMATION

2.1 Technical Description

SPECIAL FEATURES

The powerful motor combined with Hydraulic-Direct-Drive ensures high forces with extremely quiet operation.

Heavily bonded coatings on small to medium surfaces, can be removed effortlessly.

The FBS 105 stripper is self-propelled (forward and reverse). The speed is infinitely adjustable by operating the control lever.

The weights are removable for easier transport.

Guide handle is adjustable in six positions and can be individually adapted to body size or preferred working position.

2.2 Technical Specifications

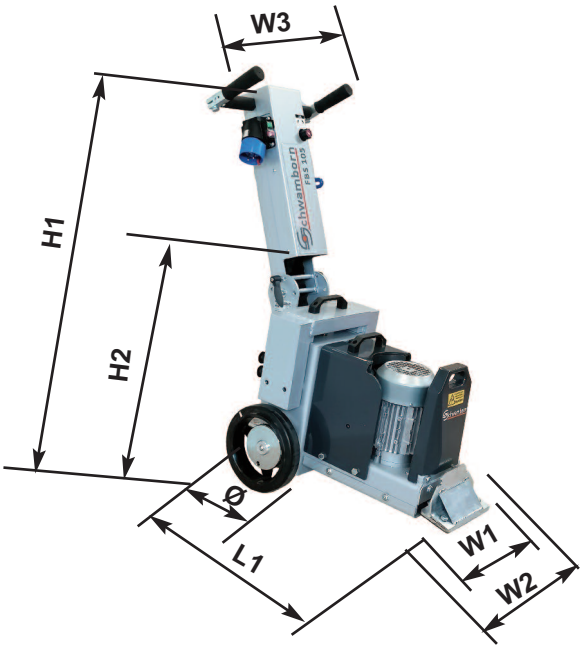
Dimensions

Height H1 (handle)	67-108 cm
Height H2 (transport)	58 cm
Length L1 (total)	70 cm
Wheel Ø	22 cm
Width W1 (blade)	21 cm
Width W2 (wheels)	36 cm
Width W3 (handle)	42 cm

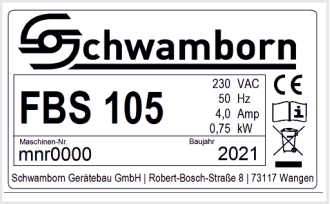
Weight

Weight incl.additional weight	105 kg
Net weight	75 kg

Electrical connection	230V/50Hz
Motor Power	0,75 kW



Identification label



Noise emissions	Standstill / Operation
Sound pressure at the ear of the operator 2000/14/EG	73 dB(A) / 68 dB(A)

Vibration levels during operation	
Hand-arm vibration on the control lever	8,5 m/s²

The vibration emission value may differ from the indication value during the actual use of the engine, depending on the manner in which the engine is used.

Take a break after 120 minutes of work at the latest to avoid damage from hand-arm vibrations.

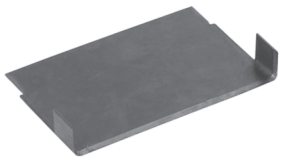
2 PRODUCT INFORMATION

2.3 Scope of delivery

Delivery complete with 5 different spare blades:

Self-scoring U-blades

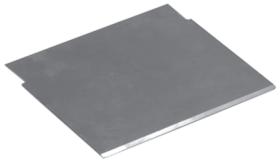
152 x 102 x 1,6 mm 1x



Tough, long lasting, self-scoring blades. 90° angled self scoring wings. Works on vinyl back, soft to medium PVC, linoleum, carpet tiles.

Standard blade

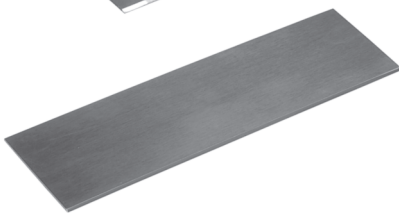
152 x 127 x 1,6 mm 1x



Works on all glued down carpets,VCT, VAT, rubber tile, cork, re-scraping adhesive, elastomeric coatings.

Premium blades

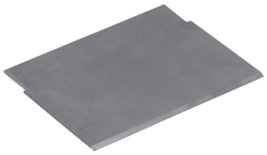
254 x 76 x 1,6 mm 1x



Ultra high quality spring steel is extra hard for long blade life.

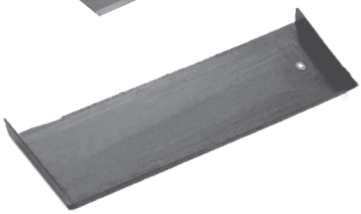
Standard blade

145 x 102 x 1,6 mm 1x



Self-scoring U-blades

223 x 76 x 1,6 mm 1x



Front weight

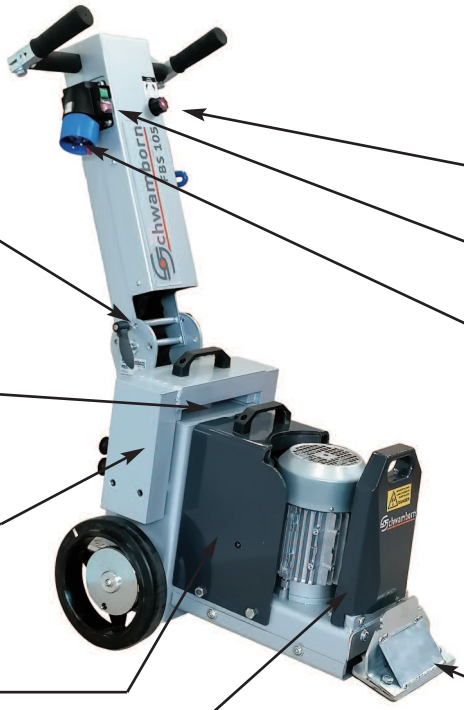
Additional weight 27 kg

Extension cable 10 m

Tool kit

2 PRODUCT INFORMATION

2.4 Controls and equipment



Handle adjustment
Adjust the grip angle in six positions.

Hydraulic tank / pressure valve

Support weight

Additional weight

Front weight

SPEED CONTROL

ON / OFF switch

Power connection

Cutting head / blade holder
easy and quick replacement of the removal tools by the clamping screws

Operating lever
Hydraulic rotary handle control with adjustable comfort grip

Tool wrench
handy on the machine for fast tool change.

Hydraulic tank / Oil level plug

Drive wheels
industrial wheels with freewheel function

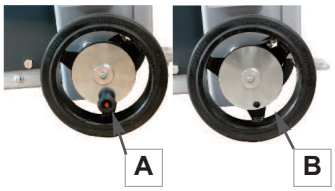
Plug bolt
to block the freewheel function

Kick plate
to support the work process.

3 TRANSPORT

3.1 Freewheel function

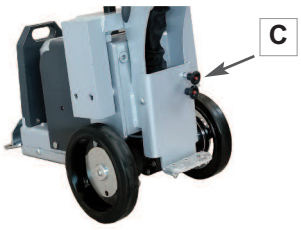
The machine wheels must be unlocked for manual movement. Moving the machine manually with locked wheels can damage the hydraulic motor!



A To unlock press the red button of the plug bolts and remove them on both sides.

C The two plug bolts can be stored on the on the back of the machine.

To use the driving force of the machine (forward and reverse), the freewheel function must be deactivated or the wheels locked before starting work.



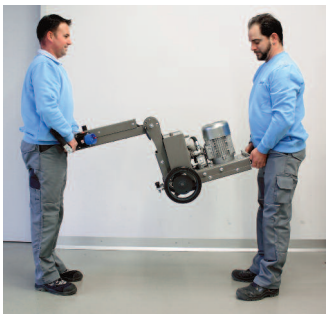
B To lock, drive the bore of the wheel carrier disc over the bore of the wheel spoke.

A Unlock the plug bolt on the red button and push it into the hole. By releasing the red button, the plug bolt is locked and sits firmly in the hole.

3.1 Raising

Always remove all counterweights and blades before loading or unloading.

Easy to lift if you can not drive the machine or have no ramp available.



ATTENTION! machine weight
Carrying or lifting the machine always with 2 people

Remove the weights -> see chapter 4.3
Adjustment of the carrying position-> see chapter 4.2

3.2 Loading/ unloading

With the help of a ramp, the machine can be transported over different levels

Make sure the ramp is clean and dry, free of grease or oil.
Always remove all counterweights and blades before loading or unloading.

1. Attach ramp securely to back of vehicle, making sure there is good contact.
2. Position machine at back of ramp, respectively at head of ramp.
3. Engage power switch and drive onto vehicle, respectively drive out of vehicle.

Lowering handle may be necessary for proper clearance into the back of smaller cars.

ATTENTION! Make sure ramp is secure before using.
Failure to do so could cause ramp to fall away from truck, causing damage to the machine and/or injury to the operator.

3.3 Storage

The machine can be stored in a space-saving manner when out of service or for transport in vehicles

Handle angle set in the storage position
(Handle angle adjustment, see chapter 4.2)

ATTENTION ! Do not lift the machine by the handle
Improper transport can cause damage to the machine and danger of falling. (Proper transport see above)

4 SETUP

4.1 Blade

Choice of blade

The correct blade size and the correct attachment of the blades, according to the respective floor covering or subfloor will provide the best performance of your machine.

The principles described are to achieve optimal work results and to facilitate the user to perform his tasks.

Blade size

For harder jobs it is better to us narrowblades,
for easy jobs you can select wider blades.

Narrow blades usually clean the floor faster, as the machine will have less restistance as when compared to using a wider blade.

Start with a narrow blade, widen the blade around the optimize cut surface.

Blade bevel

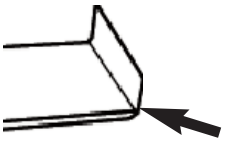
Normally bevel up blade is up for concrete.

Bevel down for wood or soft sub-floors.

Self-scoring U-blades

When using self-scoring U-blades for soft floors, pre-cutting of the lining is unnecessary. Depending on the type of product to be removed and the sharpness of the blade, it will be more difficult to control the machine.

Therefore, you should always keep the blade and the side wings/edges sharp.



Insert / replace blade

Blunt blades affect and reduce the capacity and cutting performance of the machine. Sharpen or replace the blades as needed.

Remove the power plug

CAUTION ! Sharp blade! Wear protective gloves.

Use the open-ended spanner AF17 to prevent injuries to the sharp blade.

1. Place a bock under the front of the machine.
2. Loosen the two bolts with the open-ended spanner and replace the blade.

It is not necessary to remove the bolts.

Be sure that the blade is far enough under the blade-holder,

to insure a secure hold.

4 SETUP

4.2 Handle angle

The guide handle is adjustable in six positions and can be individually adjusted to the desired working position.

Working positions

Pull out the main plug!

Hold both clamping levers
Unscrew the left clamping lever and remove the complete handle bolt (A).

(A)

Attention handle is not fixed !!
support with your body or by a second person

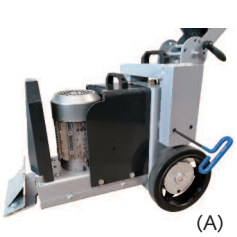
Set the handle to the desired position, push in the handle bolt (B) and tighten the clamping lever again.

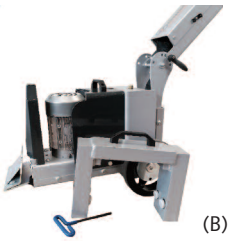
(B)

4.3 Weights

For easier transport, the weights should be removed.

To remove the support weight, remove the two bolts with the wrench on both sides (A) and remove the weight by the handle (B)


(A)


(B)

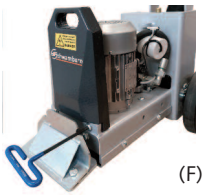
To remove the additional weight, loosen the two front bolts (C) with the wrench and loosen the upper screw with the key (D) and remove the weight by the handle (E).

(C)

(D)

(E)

To remove the front weight, loosen the two front screws (F) with the key and remove the weight from the handle (G).


(F)

(G)

ATTENTION Weights are heavy caution when removing and mounting.
To carry, put handle backwards see chapter 3.1

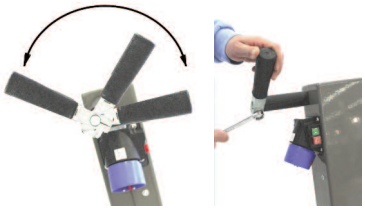
ATTENTION ! Never lift the complete machine by the weights.
The handles on the weights are only for removing and transporting the weights themselves.

4.4 Operating lever

The angle of the operating lever can be infinitely adjusted to the desired working position.

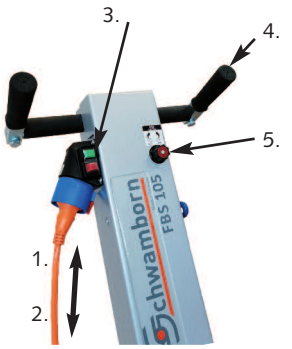
Release lever clamp with ring spanner, adjust and tighten again.

Levers must be set to the same position on both sides.



5 OPERATION

5.1 Start-up



1. Insert the plug of the extension cable into the socket on the guide handle of the machine.

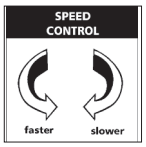
2. Insert the plug of the extension cable into the socket/ wall power supply.

3. Turn on the machine
   GREEN - Start button
   RED - Stop button

4. You control the machine by operating the lever

   FORWARD -> Press the control lever forwards
   REVERSE -> Push control lever backwards

5. Set the speed
   The speed can be adjusted during forward run on the SPEED CONTROL button



   Faster -> counterclockwise
   Slower -> clockwise

In reverse, the speed can not be controlled manually.
The machine always runs backwards at maximum speed

For immediate shutdown of the machine**-> Release the control lever!**
These automatically go to the neutral position

The pressure valve is factory set and should not be adjusted.

The hydraulic oil is filled at the factory ready for operation.
Filling / replacing the hydraulic fluid -> see chapter 6 Maintenance

5.2 Safe operation

Clean work area
Loose components or tools lying around are sources of accident.
Pay attention to tidiness and cleanliness in the work area!

In case of very dusty environment and thus limiting visibility, ensure suitable extraction / ventilation.

WARNING! Risk of injury!
Avoid collisions
Only use the machine in safe conditions.
Always keep an eye on obstacles, especially when running backwards.

Always place the power cord behind the machine on the cable holder and away from the tool so that it does not come into contact with it. Driving over or damaging the electric cable may result in electric shock.

Break / end of work
In order to avoid physical damage, regular breaks must be observed in accordance with the Technical Regulation for the Noise and Vibration Safety Regulations - TRLV.

ATTENTION! Risk of injury!
Immobilize the machine when not in use, by pulling the power plug and removing the blade.

5 OPERATION

5.3 Removal of floor coverings

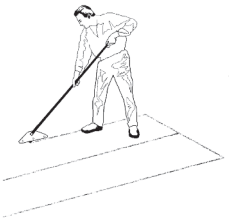
VCT tiles

Keep blades sharp! Keep your work area clean and clear of debris.
Always wear eye- and ear- protection when working with the machine.

Wear eye and ear protection when working with the machine!

Never use a blade wider than the size of the tile being removed. If goods being removed still do not come up clean or the machine jumps on top of goods, reduce blade size to a smaller blade until proper blade size is found or use a smaller portion of the blade.

Vinyl-, Rubber, PVC, Direct Glued Carpet



Scribing coverings previously and cut into sheets.

Pre-scored carpet makes machine easier to control and blades stay sharper longer.

For soft coverings, the self-scoring blade can also be used.

It is best to pre-cut the sheets with the scoring device.

Ceramic tiles

Before removing ceramic tile, tiles will have to be pre-broke with a mallet or large hammer.

On small random block styles of tile, pre-breaking may not be necessary.

Open an area large enough for machine or blade to fit in, or start from a doorway.

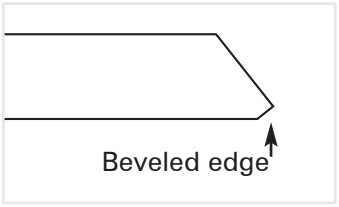
Keep work area clean to keep good wheel contact with floor. Use slow speed and small blades.

6 MAINTENANCE

6.1 Sharpen blades

Blunt blades greatly reduce cutting performance.
Sharpen or replace the blade if necessary.

Standard blades
When used continuously, the blades develop a bevelled edge.



The blade is only really sharp,
when the bevelled edge is completely removed.

- Always wear gloves and safety glasses.
- Grind the blade with a grinding wheel of 120 grit or finer.
- Move the grinder along the edge of the blade and hold the grinder at the correct angle to the blade.
- Grind until the blade is sharp.
- Be careful not to catch the grinding disc on the edge or corner of the blade.

WARNING! Risk of injury!
Blades are sharp. Be extremely careful.

NOTE! Recommendation for optimal use of blades

- Thinner blades are easier to sharpen, but break off more easily.
- Have enough sharp blades for each job so that you do not have to sharpen them during a job.
- It is easier to grind the blunt blades on a real work bench or with a belt grinder in the workshop and prepare for the next job.

Bevel up

Bevel down

1. Sharpen the blade mounted to the machine.
   It is not necessary to remove the bolts.
   Using hand grinder, block up front of machine so blade is off the floor.

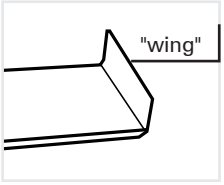
   Sharpen the blade with a 10 cm diameter disk with 120 or finer grit.

   Be careful not to catch disk on edge or corner of blade.

2. Furthermore there is the opportunity to remove the blade from the machine and to sharpen the blade at a vice, obeying the same procedure as shown in "1.".

Sanding with a fine-toothed file

Self-scoring blade
It is important to keep the "wings" of the self-scoring blades sharp. Use a file at the "wing" edge. Sharpen the flat end of the blade exactly as described above.



Blades with carbide tip
To sharpen carbide tips you will need a green carbide grinding disk, for example a diamond disk.

6 MAINTENANCE

6.2 Maintenance schedule

Maintenance locations must be outside of hazardous areas.
Maintenance work must be carried out with the machine switched off to prevent accidental start-up of the machine:

- Pull out the mains plug!

Maintenance by the user

Daily before you commence work

- Clean the wheels, they need to be free of accumulated dirt
- Checking the wheels for abrasion, they must have sufficient thread.
- Check if all safety devices are working and are installed.
- Check for hydraulic oil leaks.

WARNING! Risk of injury by hydraulic fluid!
Never visually inspect hydraulic components while the machine is running.
Never seek or touch pressurized hose assemblies.
Leaking pressurized hydraulic fluids may develop a mist or fine spray liquid that squirts or explodes on ignition.

If hydraulic fluid leaks
- Keep ignition sources away
- Contact the manufacturer or specialist workshop.

- Replacement of hydraulic oil and oil filter- see chapter 6.3

Maintenance by the manufacturer

annually or after the first 500 hours of operation
then every 1000 operating hours - according to the checklist
- Inspection of hydraulic hoses and connections
- Inspection of safety equipment
- Inspection of the screw connections
- Inspection of electrical components and connections

Requirements for the hydraulic hose according to BGR 237
Recommended inspection period
Normal requirements 12 months

Recommended replacement intervals
Normal requirements 6 years
(Operating time including a maximum of 2 years storage period)

6 MAINTENANCE

6.3 Hydraulic oil

Operating instructions for handling hydraulic oil according to § 14 Ordinance on Hazardous Substances

Dangers for humans and the envirnoment

Hydraulic oils are flammable. Vapors released when exposed to very high temperatures and spray can form explosive mixtures with air.
There is a risk of ignition of oil-soaked clothing.
Frequent or prolonged contact with the products, even through oil-soaked clothing, can cause skin diseases, e.g. inflammation, rash, oil acne. Products exposed to high temperatures may accumulate with hazardous substances.
Water pollutant.

Protective measures and rules of conduct

Store and fill hydraulic oils only via drip pans, avoid splashing. Do not overfill drip pans with containers and do not use to store other materials.
Keep away from ignition sources, do not smoke. Do not mist lubricants.
Keep container closed and protect from heat.
Keep soaked cloths in non-combustible, closed containers.
Replace cleaning rags regularly.
Mark filled containers, replace defective markings.
Never use food containers or containers to be confused with them.

Hand protection: for long-term use resistant chemical protective gloves
Skin protection: Avoid contact with skin and clothing.

Immediately change soaked clothing and put on only after cleaning. Do not put smeared cloths in the pockets of work clothes. Do not use solvents, thinner, benzine or something similar for skin cleansing.

Behavior in case of danger

leak:	After leakage, immediately take up with oil binder (for example Antipestol III) and place in designated waste containers; Ventilate the room well. Caution, danger of slipping on greasy soil.
fires:	Have fire extinguisher available for fire class B. Do not extinguish with water. In case of fire, there is a risk of bursting of closed heated containers, therefore leave oil storage in case of danger.
escape route:	See marking of escape routes and emergency exits

First aid

after skin contact:	Thoroughly wash with soap and water, remove previously soaked clothes.
after eye contact:	Rinse with an open eye and toward the outer eye for ten minutes in running water, visit a eye specialist.
after swallowing:	Do not induce vomiting, consult a doctor.
after penetration of oil:	After penetration of oilunder the skin immediately consult medical attention!

Proper disposal

Collect waste in labeled non-combustible containers; Keep waste containers and empty containers closed, empty at the latest at the end of the shift or remove them from the work space.

Source: BGR 237 Appendix 2

6 MAINTENANCE

6.3 Replacement of hydraulic oil

Resources

Hydraulc oil	AVIA Fluid RSL 150 or compatible light liquids according to ISO 150 DIN 51524 T2
Capacity	5 Liter Order No 111 800 310 : 5-L container Order No 111 800 305 : 1-L container

ATTENTION !
Keep the hydraulic fluid clean and at the specified level.
Incompatible fluids can damage the unit or cause serious injury.

Preparation
Wear protective gloves and goggles!

Level of hydraulic fluid

The machine is ready for operation ex works filled with hydraulic oil. The level is below the oil level screw.

Check the hydraulic fluid level if there is a leak, damaged or broken hose or loose fitting.

Filling / replacing the hydraulic fluid

To fill up with hydraulic fluid, unscrew the oil level plug at the rear of the tank and fill up to the mark.

To replace hydraulic fluid, unscrew the oil level plug at the rear of the tank and the pressure valve at the top of the tank.

Suck out the old hydraulic oil with a special hydraulic oil suction device.

A container of about 5 liters is needed to drain the liquid.

Fill with new oil.

ATTENTION ! Do not overfill. Observe marking!

Assemble the oil level screw on the rear of the tank and the pressure valve on the top of the tank.

DECLARATION OF CONFORMITY

CE

We

Schwamborn Gerätebau GmbH
Robert-Bosch-Strasse 8
73117 Wangen/Göppingen
Germany

declare under our responsibility that the product

Machine type	**Hydraulik Stripper**
Model	**FBS 105**
Order-No.	**619002**
Serial-No.	_____
Year of manufacture	_____

comply with the EU-Directrives
Machinery directive 2006/42/EC
EMC directive 2014/30/EU

in accordance with with following standards

EN ISO 12100
EN ISO 55011
EN ISO 61000

The following national standards were applied:

BGR 237

Wangen, March 2022

Signatory:

E. Schwamborn

Eckart Schwamborn, managing director

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