



Operating Manual - Floor Grinder G4



Contents

1. Introduction	4
1.1. Owner responsibility	4
1.2. Copyright	4
1.3. Product description	4
1.4. Intended use	4
2. Product overview	4
2.1. Floor grinder G4	4
3. Safety instructions and information	5
3.1. Safety definitions	5
3.2. General machine safety warnings	5
3.3. Electrical safety warnings	5
3.4. Safety warnings for assembly	5
3.5. Safety instructions for operation	6
3.6. Personal protective equipment	6
3.7. Work area safety	6
3.8. Safety instructions for maintenance	6
4. Assembly	7
4.1. General	7
4.2. Tool wheels and diamond grinding wheels	7
4.3. Assembly and disassembly of the shaft	8
4.4. Position during storage and wheelbase	8
4.5. Mounting a tool or diamond grinding wheel	8
5. Operation	9
5.1. Before use	9
5.2. During use	9
5.3. During the work	10

Contents

6. Maintenance	10
7. Errors and troubleshooting	11
8. Transportation, storage and disposal	12
8.1. Transportation of the product	12
8.2. Storage of the product	12
8.3. Disposal of the product	12
9. Technical data	12
10. EC Declaration of Conformity	13

1. Introduction

1.1. Owner responsibility

In accordance with product liability laws, we are not responsible for damages resulting from the followings:

- Incorrect repair of the product.
- Use of non-manufacturer-approved parts for repairs.
- Use of non-manufacturer-approved accessories.
- Product repair performed outside of approved channels.

If you have any questions after reading this Operating Manual please get in touch with the manufacturer or the nearest service center. The manufacturer is not responsible for any damage or breakdown resulting from non-observance of the Operating Manual.

1.2. Copyright

The text and illustrations may not be copied or reproduced without the express permission of JLM Group.

2. Product overview

2.1. Floor grinder G4

1.3. Product description

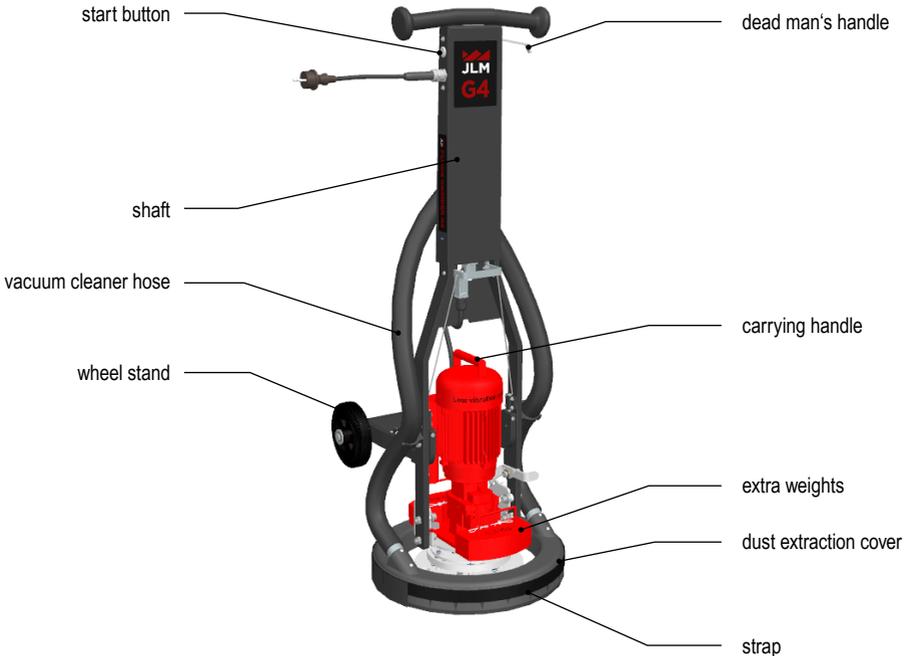
The floor grinder is designed to effectively grind surfaces of different hardness.

1.4. Intended use

The machine is specifically designed for grinding of surfaces of different hardness of materials, including natural stone, terrazzo, and concrete. It is also adept at grinding cover materials such as epoxy and glue. The finishsurface can be rough or smooth and the machine suitable for both dry and wet grinding applications. DO NOT use the product for other tasks.

This machine is intended for commercial use and tailored for operation by skilled professionals.

⚠ CAUTION: Read the instruction manual before using the machine!



3. Safety instructions and information

3.1. Safety definitions

Warnings, cautions and notes are used to point out especially important parts of the manual.

 **WARNING:** Used if there is a risk of injury or death for the operator or bystanders if the instructions in the manual are not obeyed.

 **CAUTION:** Used if there is a risk of damage to the product, other materials or the adjacent area if the instructions in the manual are not obeyed.

 **NOTE:** Used to give more information that is necessary in a given situation.

3.2. General machine safety warnings

 **WARNING:** Read all safety warnings, instructions, illustrations and specifications provided with this machine. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Basic precautions should always be followed, including the following:

- Always exercise with care and use your common sense. If you get into a situation where you feel unsafe, stop and seek expert advice. Contact your dealer, service agent or an experienced user. Do not attempt any task that you feel unsure of!
- Read the operator's manual carefully and use the machine only as described in this manual.
- The product must be kept clean. Signs and stickers must be fully legible.
- Do not allow to be used as a toy and do not play with the appliance.
- This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
- Operators shall be adequately instructed on the use of the machine.
- Never use this product if you are fatigued, under the influence of alcohol or drugs, medication or anything that could affect your vision, alertness, coordination or judgment.
- Do not handle plug or use the machine with wet hands.
- Never use a product that is faulty. Carry out the safety checks, maintenance and service instructions described in this manual. Some maintenance and service measures must be carried out by trained and qualified specialists.

3.3. Electrical safety warnings

- Before using the machine, make sure that the power & voltage corresponds with the voltage shown on the machine's rating plate.
- Use only manufacturer's recommended attachments.
- Using damaged cables can be dangerous and should be replaced immediately.
- Improper connection of the equipment-grounding conductor can result in a risk of electrical shock. Check with a qualified electrician or service person if you are in doubt whether the outlet is properly grounded. Do not modify the plug provided with the machine. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.
- If using an extension cord make sure the cord rating is suitable for this machine.
- Do not use the machine with damaged cord or plug. If the machine is not working as it should, it has been dropped, damaged, left outdoors or dropped in water. Make sure it is repaired by a qualified person.
- Do not use a coiled cable due to the potential risk of overheating. Ensure that the power cable is kept away from the tool plate at all times during operation. Use the machine only on horizontal surfaces for optimal performance and safety.
- Regularly inspect the cord and plug for damage. Do not use it with a damaged cord or plug.
- Do not close a door on cord, or pull cord around sharp edges or corners. Do not run the machine over the cord. Keep the cord away from heated surfaces.
- Do not unplug by pulling on cord. To unplug, grasp the plug, directly to disconnect it safely.

3.4. Safety warnings for assembly

- Turn off the machine before unplugging.
- Unauthorized modifications and /or accessories may lead to serious injury or death to the user or others.
- Risk of personal and material injury.
- To avoid dust, use a dust extractor with adequate power adapted to the work. Additionally, consider implementing air purifiers or ionizers to reduce the amount of particles in the air.

3. Safety instructions and information

3.5. Safety instructions for operation

⚠ WARNING: Ensure that others in the room do not get too close during operations. The machine may exhibit sudden sharp turns upon startup or when driving on an uneven surface. When using the machine maintain a safety distance of at least two meters from people other than the operator.

- When grinding coarse materials such as glue residues or asphalt and the wheel stand is used as a support during grinding, ensure the following steps: before each lifting of the motor (lowering of the handle) stop the motor operation and confirm that the rotation has stopped. This step is essential to avoid the spread of dust or possible risk of material being ejected.
- In order to avoid the so-called „white fingers“ which can occur when working longer hours, it is recommended to stop the machine regularly and exercise your fingers and hands.

3.6. Personal protective equipment

- Always use approved personal protective equipment during operation. Personal protective equipment does not give you full protection but it decreases the degree of injury if an accident occurs.
- Use approved protective gloves when you maintain the product.



Wear eye protection.



Wear breathing mask



Wear hearing protection.



Wear safety shoes.



Wear protective gloves.



Wear protective clothing.

3.7. Work area safety

- Make sure that there is another person nearby who can be alert in case of an accident.
- The machine is intended to be used without water cooling of the tools but can be operated on damp floors provided the machine is not exposed to persistent wetness and the humidity is not extremely high.
- Some tools can become very hot after sharpening. Allow the tools to cool down and wear gloves.



Dust



Vibrations



Buller

3.8. Safety instructions for maintenance

- Make sure the engine is switch OFF.
- Disconnect the product from the wall outlet.
- Do not modify the product from its original design.
- All repairs must be performed by a qualified service person
- Use only manufacturer-supplied or equivalent replacement parts.
- Use approved protective equipment.

4. Assembly

4.1. General

The JLM floor grinder can be used in several ways:

- Utilizing extra weights provides an efficient sensation.
- Operating without additional weights offers a gentler experience.

Furthermore, regardless of the selected configuration, the machine can be utilized in two additional manners:

- **With wheels up:** in normal mode, enhancing efficiency and optimizing tool economy.



- **With the wheels down:** Ensuring full contact of the grinding wheel with the ground, facilitating a smoother experience and particularly advantageous for beginners.



The most suitable method for each task may vary depending on the circumstances. Typically, for harder floors, higher pressure is necessary. When grinding concrete floors with diamond wheels, employing hard pressure is preferable, achieved by grinding with the wheels raised and utilizing extra weights. However, it's important to note that when using silicon carbide stones or brushes, operating with the wheels down is not feasible.

4.2. Tool wheels and diamond grinding wheels

There are many different types of discs, including:

1. **Tool disks with different hole patterns** (different art.no.) designed for silicon carbide bit stones, diamond blocks, etc. These can be equipped with a plastic plate featuring spikes for attaching scouring pads and similar accessories.



2. **Tool disc with cellular rubber** for sanding paper and HM chips.



3. **Diamond grinding wheels** - available in several designs with differing grains and hardnesses suitable for grinding or removing coatings.



4.3. Assembly and disassembly of the shaft.

When assembling, ensure that the shaft with the wheel stand aligns with the grooves on the sides of the engine.

Stand in front of the machine with the shaft turned so that the dead man's handle is on the right. Slide the bottom of the shaft into the slots, then tilt the shaft backward over the engine until it securely locks in place.

Connect the electrical plug and position the hoses in place.



To remove the handle, disconnect the electrical plug, remove the hoses. Lift the handle, push down the latch with your foot and tilt the handle forward past the two latch positions.

i **NOTE:** Always disconnect the electrical plug between the motor and the shaft before tilting the shaft of assembly.



4.4. Position during storage and wheelbase

When the machine is not in use, the shaft can be securely locked in an upright position using a ratchet mechanism. This way the machine takes up minimal space. This can also be useful for transportation. To release the wheel rack, either fold down or fold up the handle.



4.5. Mounting a tool or diamond grinding wheel

- 1 Lower the wheel stand
- 2 Lift the motor from the floor by pushing down on the shaft.
- 3 To release the wheel rack, either fold down or fold up the handle.
- 4 Tilt the shaft upward again so that the motor faces the floor and turn the motor until the mounting plate (tool disk) locks in place.

For installation of different grinding wheels and tools: see also the instructions for each tools. After assembling the tool, adjust the edge band to ensure proper coverage.

i **NOTE:** edge bands are available in different heights. Choose an edge band that suits the tool and the task at hand.



5. Operation

5.1. Before use

Before sanding inspect the floor carefully to help you choose the appropriate tools and equipment under adequate lighting.

Remove any bolts, iron fittings, etc. and thoroughly sanded them down using an angle grinder. Differences in level or unevenness must be smoothed out to avoid damage.

Ensure that the edge band of the dust cover is complete and tight, and verify that the machine is in good condition. Use only tools designed for the machine. Do not use damaged tools.

Connect a vacuum cleaner with sufficient power and try to maintain good ventilation in the room or use an effective air purifier.

To avoid blowing the fuse, ensure that the power supply is provided by cables with adequate capacity and that avoid using excessively long or coiled cables, which may pose a risk of overheating.

5.2. During use

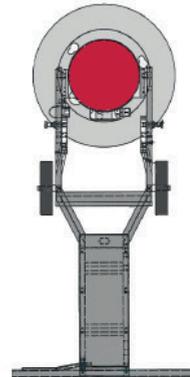
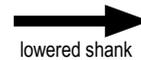
Connect the machine to a 230V plug.

When operating without the wheel stand:

- The machine is commonly used with the tool disc placed directly on the floor without relying on the wheel frame for support.
- The machine is equipped with a „dead man’s handle“ which means that the engine cannot be started unless the handle on the left side of the handle bar is pressed.
- To start, first press the start button on the right-hand side. Then press the „dead man’s handle“ on the left side to start the machine’s engine. Afterward release the start button.

i NOTE: This action may cause the machine to jerk, and the rotation of the disk could potentially throw the machine sideways. Be prepared to parry the machine as follows:

- Ensure the machine is balanced over the tool plate. If you lower the shaft, the machine pulls to the left.
- Normally, you’ll find the right balance immediately, ensuring full control of the machine. However, ensure there’s nothing nearby that could be damaged in case of a fall when starting the machine.



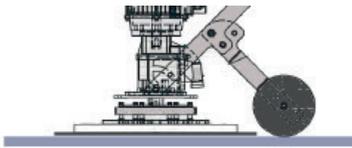
- Releasing the dead man’s handle stops the engine, requiring the machine must be restarted as described above.



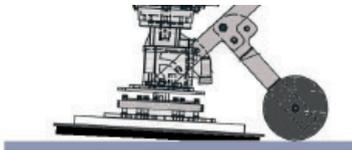
When operating with the wheel stand in down position:

- Lift the grinding wheel from the floor by pushing down on the handle. Start the motor as described above. Then slowly lower the engine until the tool disc makes contact with the floor. Grind with the required pressure on the disc while the machine rests on the wheel stand.

i **NOTE:** The entire tool should normally be in contact with the ground. Grinding with the wheel frame as a support is not possible when the machine is mounted with tools that alter the angle significantly. When using silicon carbide stones and brushes raise the wheelbase.



correct angle to the ground



incorrect angle to the ground

5.3. During the work

- Make sure you have a vacuum cleaner with adequate power, and empty or change the bag frequently. Also use an efficient purifier or an ionizer or ensure a high air exchange rate in the room.
- Check the wear of the tool closely. If wear is too high, consider switching to a more suitable tool for the task.
- Adjust the edge band to ensure proper coverage and protection against dust dispersion. Replace any worn or damaged edge bands promptly. Note that there are edge bands with different heights, so choose the right edge band for your tools and tasks.
- Always keep the power cable away from the tool pulley during work. Remember that tools can become hot during grinding. Wear gloves when changing them.
- Prevent vibration injuries. Take regular breaks during longer work shifts to exercise your fingers and hands. Always use prescribed protective equipment.

6. Maintenance

! **WARNING:** Use personal safety equipment during service. Refer to Personal protective equipment in chapter 3.6.

- Most accidents involving machines occur during troubleshooting, service and maintenance as staff have to locate themselves within the risk area of the machine. Prevent accidents by being alert and by planning and preparing the work.
- All checks involving electric components should only be performed by a licensed electrician.
- Ensure that you clean both the machinery and the interior of the dust cover after each operation. Use proper personal equipment when you clean the product.

- After about 1000 hours of operation or once a year check the oil level in the gearbox. In order to check it insert a screwdriver into the oil filter hole. The oil level on the dipstick should be measured around 15mm, which is equivalent to approximately 2 deciliters of oil

7. Errors and troubleshooting

If the machine does not start, check that the correct mains voltage is supplied to the machine and ensure that no fuse has blown in the building's electrical panel. If the fuse has blown, check whether it occurred due to damaged, too thin or too long cables.

The motor has a built-in protection against overheating. If the machine stops during the operation and cannot be restarted, it might be due to motor overheating triggering the built-in protection mechanism. In this case, allow the engine to cool down before attempting to restart the machine.

To prevent motor overload, ensure that the pressure on the grinding head is not too high. Try to reduce the pressure by removing any weights or by pushing the handle down if the wheelbase is down to relieve the pressure on the tools.

If, despite the above checks, the engine still does not start or only a faint engine noise is heard, it may be due to a defective starting relay or a defective capacitor. Contact an authorized service center.

If the machine vibrates strongly, it may be due to worn springs and bushings. The machine's mounting plate is supported by shock absorbing springs and bushings that may be worn or damaged. Ensure you have a spare set available for replacement. After replacement lock the fixing screws with Loctite.

20: Spacer (P7000557)



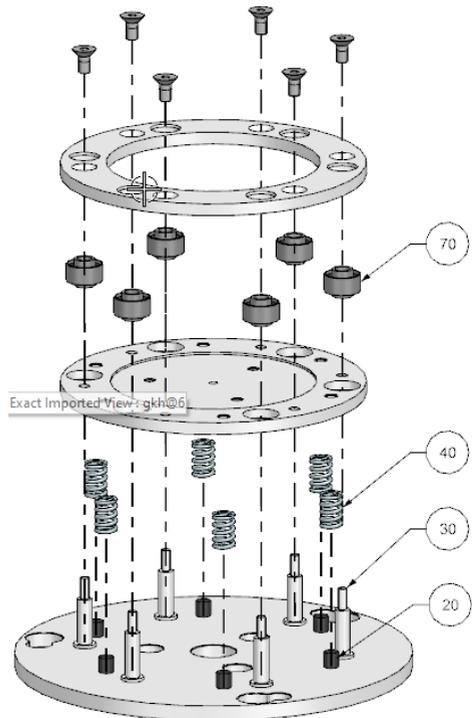
30: Buffer (R7500067)



40: Springs (R7500068)



70: Damper bushing (R7500069):



8. Transportation, storage and disposal

8.1. Transportation of the product

- Ensure that the machine is protected from moisture during transportation.
- Make sure the machine is well anchored during transportation. The engine does not need to be upright. For longer transportation and storage, keep the machine in standing position.
- Use ramps or winches to lift the floor grinder to make sure that movements are safe. Get aid if you are not sure about how to lift heavy equipment.
- Attach the product safely during transportation in order to prevent transport damage and accidents.
- If possible, do the transportation of the product during good weather conditions.
- If possible, use a closed vehicle during transportation of the product.

8.2 Storage of the product

- The product must be stored inside away from outdoor elements.
- Do not expose the product to rain or moisture.
- Disconnect the product from the power source.
- Store the product in a standing way.
- Store all equipment in a locked area, so that it is out of reach of children and unauthorized persons.

8.3. Disposal of the product

- Obey the local recycling requirements and applicable regulations.
- When the product no longer is used, send it to the dealer or discard it at a recycling location.

9. Technical data

Data	Floor Grinder G4
Power	0.9kW
Voltage	230V, 1 phase
Current	6.5-10A
Speed	110rpm,
Vibration Measured value	<2.5m/s ² 1.84m/s ²
Sound power level	84db(A)
Weight	
Machine incl. wheel stand	33kg
Extra weights	x 5.3kg
Machine incl. weights	43.6

Included in the standard version:

- handle with wheel set
- dust cover with hoses
- dust strip
- weights (2x5.3kg)
- allen key holder

10. EC Declaration of Conformity

In accordance with the EC Machinery Directive 2004/108/EC:

We hereby declare that the equipment described below including its concept, construction and design as marketed by our company complies with the relevant fundamental safety and health requirements of the EC directive. This declaration becomes invalid on any unauthorized modification of the equipment.

Applied Standards

ISO 5349-1:2001

ISO 5349-2:2001

ISO 20643:2005

Designation of the units

Floor grinder

Type

G4

Country of origin

Bulgaria



Torbjörn Bengtsson

MBD

Plovdiv, 11 01 23

Responsible for documentation

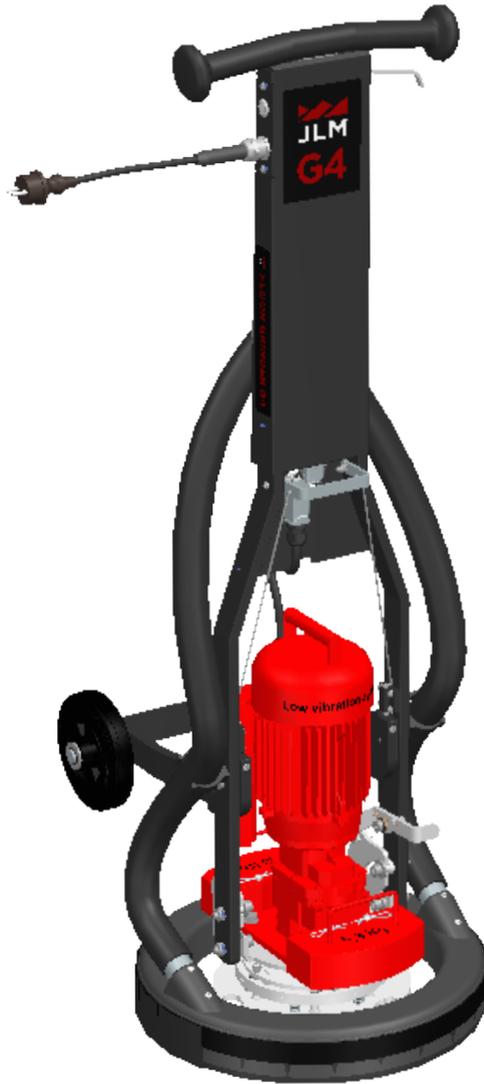
Benny Aronsson, CEO



JLM Group
Nedyalka Shileva 20
4000 Plovdiv, Bulgaria

Email: order@jlmgroup.com
www.jlmgroup.com

Tel: +359 12 34 56 78



worldwide

www.jlmgroup.se