

# Angle grinder 230mm

Item No.: 28215

Model No.: S1M-HJ2118-230



## Manual for use



Please read this manual carefully before using.

# 1. Technical specifications

Item No.	28215
Model No.	S1M-HJ2118-230
Rated voltage	230 V, 50 Hz
Power	2400 W
No load speed	6600 min <sup>-1</sup>
Protection class	II
Disc diameter	Max 230 mm
Bore diameter	∅ 22.2 mm
Length of electric cord	2 m
Spindle thread	M14
Noise level	L <sub>pA</sub> :95,6 dB(A), K <sub>pA</sub> : 3 dB(A) L <sub>WA</sub> :106,6 dB(A),K <sub>WA</sub> : 3 dB(A)
Weight	5,8 kg

# 2. Components and controls



**Fig.1**

- 1. Power cord
- 2. Handle
- 3. Switch
- 4. Locking button of switch
- 5. Handle rotation button
- 6. Auxiliary handle
- 7. Spindle lock button
- 8. Protection guard

## 3. Safety



**Warning: Using any tool can be dangerous. Always select the right tool for the job.**

**Caution:** The tool can get hot after use. Should be used by a competent person. If in doubt consult an electrician.

**Cutting/Grinding:** Before attempting to cut/grind any object, first familiarize yourself with the correct procedures and techniques of cutting/grinding as well as the different cutting discs, grinding discs and flap discs.

### 3.1 Work area safety

- Keep working area clean and well lit, if not working outside in the open.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gasses or dust work conditions. Power tools create sparks that may ignite the dust or fumes or cause injuries or damage to the surrounding person or object.
- Keep bystanders away while operating a power tool. Distractions can lead to potential loss of control.

### 3.2 Electrical Safety

- Do not modify the power tool plug in any way or use any adapter plugs with earthed (grounded) power tools. Original plugs and matching outlets will reduce the risk of electric shock.
- Avoid contact with earthed or grounded surfaces such as pipes, radiators, and refrigerators, whilst operating the power tool.
- Do not expose power tools to rain or wet conditions. Water is a conductor of electricity which increases the risk of electric shock.
- Do not use the cord for carrying, pulling or unplugging the power tool in any way. Avoid the cord from making contact with heat, oil, sharp edges or moving parts. Damaged or tangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. RCDs reduces the risk of electric shock.
- Do not use the power tool if the switch is faulty. Using any power tool that cannot be controlled with a switch is dangerous and must be repaired immediately.
- When using an extension cord, an undersized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension to make up the total length, be sure each extension contains at least the minimum wire size. If in doubt, use equal to that of the machine cord.

### 3.3 Personal Safety

- Always wear protective equipment when operating a power tool. Proper protective equipment such as a dust mask, ear protection, and gloves will reduce personal injuries.
- Proper workwear. Do not wear loose clothing or jewellery. Keep your hair, and clothing away from all moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- Remove any adjusting key or wrench before turning the power tool on and ensure that the accessories are secure and correctly fitted.
- Always ensure the switch is in the off-position before connecting to the power source, picking up or carrying the tool. Always use two hands to hold the tool when operating.
- Keep a proper stance and balance at all times and do not overreach - especially on large objects/ surfaces.
- Ensure bystanders are kept at a safe distance from the work area. Anyone entering the work area must wear personal protective equipment. Fragments of the workpiece or a broken accessory may fly off and cause injury beyond the immediate area of operation.

## 4. Correct Usage

- Use the power tool and the accessories in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- This tool is designed to be used for cutting, grinding, specific sanding operation. Note all the warnings, instructions, indications provided on drawings and specifications supplied with this tool and in this manual.
- The tool must be used with the accessories that have been specifically designed or recommended by the manufacturer.
- The rated speed of the accessories must be at least equivalent to the maximum speed specified on the tool. Using the accessories at speeds above the rated specifications may cause them to break or be projected into the air or damage the workpiece or the operator.
- Hold power tool by insulated surfaces only with both hands when cutting or grinding. Accessories contacting a "live" wire may make exposed metal parts of the power tool "live" and shock the operator.
- Never lay the power tool down before the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control or potentially damage the tool and work surface.
- Regularly clean the power tool's air vents by using an air duster. Ensure the tool is disconnected from the mains.
- Do not operate the power tool near flammable materials. Sparks could ignite these materials.

## 5. Tool & accessory use and care

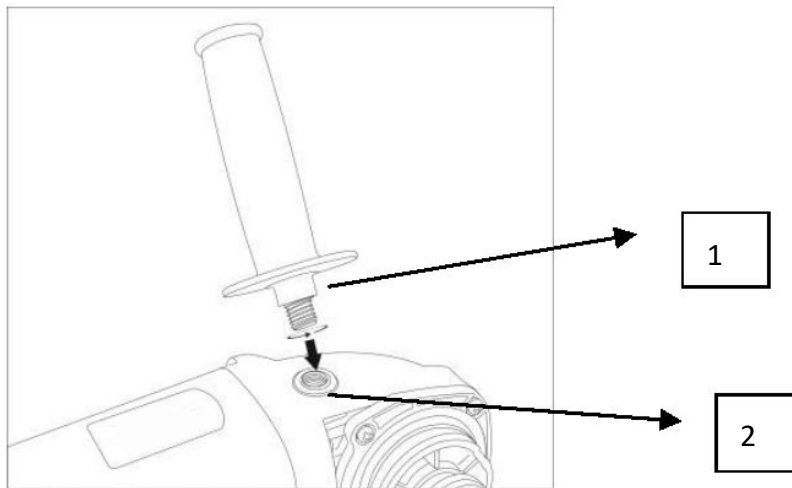
- Avoid forcing the power tool into the material. Allow the power tool to do the job for which it was designed for.
- Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Never leave power tools unattended and store them away when not in use.
- The diameter and thickness of the discs used must correspond to the specifications of the tool. Other discs will not be adequately guarded and cannot be used in a controlled manner.
- Maintaining your power tool: Check for misalignment binding of moving parts, broken or damaged parts and any other condition that may affect the power tool's operation and user's safety. If damaged, have the power tool repaired before use.
- Do not use damaged discs. Before use, inspect the disc for damage such as chipping, cracks, excessive wear and loose parts. If the tool is dropped, the affected disc must also be checked. After inserting the disc onto the angle grinder, run the grinder at maximum speed and check if all is in order. Do not stand or allow other people close by to stand in the midst of the rotating disc.
- After switching the angle grinder off, wait for the disc to come to a complete stop before putting it down. The rotating disc could come into contact with the surface and move the tool in an uncontrolled manner.
- Do not use accessories that are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.

## 6. Getting Started

### 6.1 Fitting the accessories

#### 6.1.1 Auxiliary handle

Figure 1

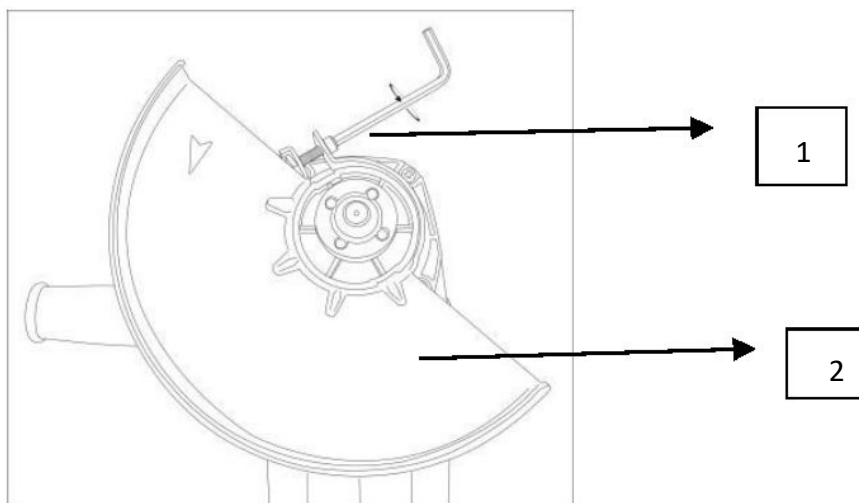


• **Figure 1**

1. Screw the auxiliary handle on to the slot.
2. Make sure the auxiliary handle is tightly screwed in, avoid over screwing, this will damage the thread.

#### 6.1.2 Protection guard

Figure 2



• **Figure 2**

1. Attach the protection guard by rotating the protection guard to such an angle that it can protect the operator according to work.

2. Be sure to tighten the screw securely, use the provided hex wrench to fasten the hex screw.

### 6.1.3 Cutting/ grinding blade.

Figure 3

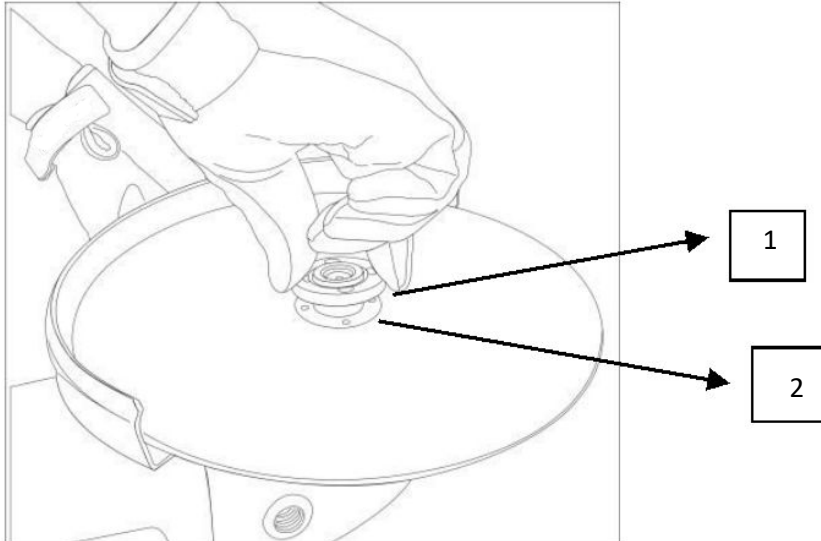
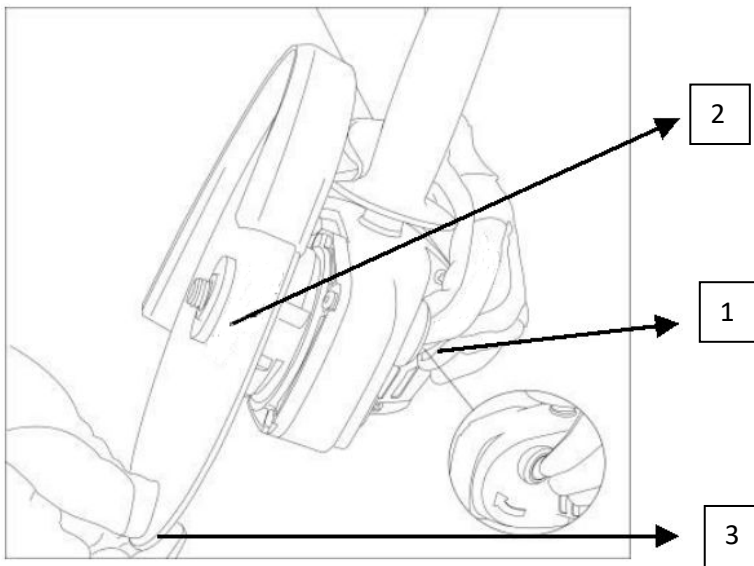


Figure 4



• **Figure 3**

1. Insert the blade and make sure its laying on top of the bottom flange nut securely, it must not move.

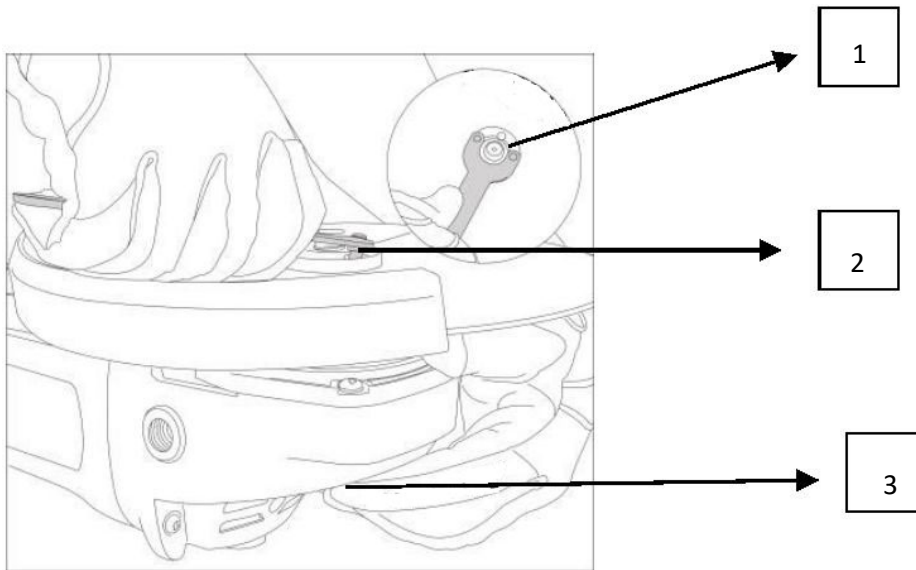
2. Carefully insert the top flange nut while holding your blade in place on the bottom flange nut.

• **Figure 4**

1. Press the spindle lock button.
2. Twist the blade while pressing the spindle lock till it's locked in place and cannot turn.
3. Screw top flange nut flush with the blade.

### 6.1.4 Wrench

**Figure 5**



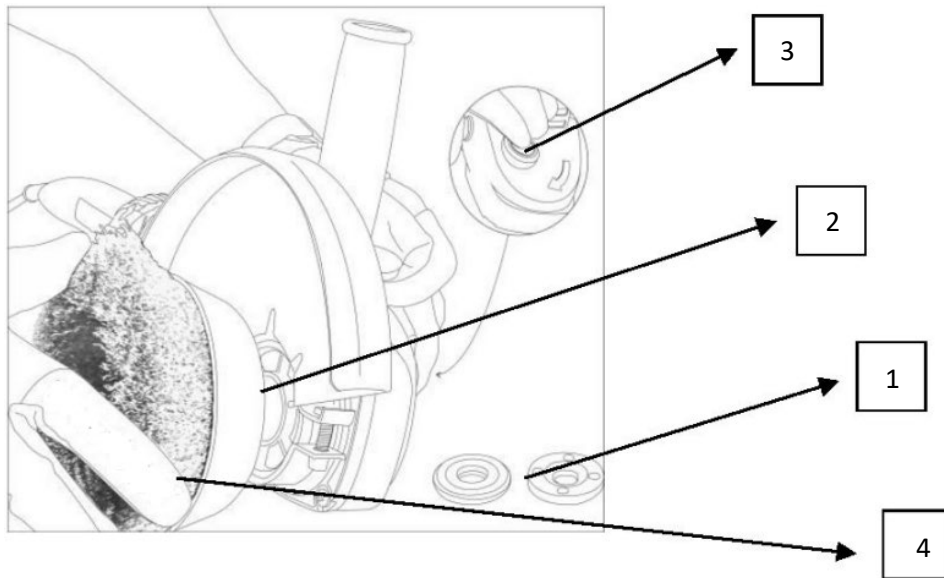
• **Figure 5**

1. Insert your spanner on the top flange nut.
2. Make sure the spanner is inside the top flange nut slots and tighten, give it one turn.
3. Press the spindle lock button while turning to lock the disc in place.



## 6.1.5 Inserting Wire Brush

Figure 6



• **Figure 6**

1. Remove the top and bottom flange nuts, as they are not required for this accessory.
2. Insert the wire brush into the M14 threaded spindle.
3. Press the spindle lock button as you turn the wire brush.
4. Screw wire brush clockwise till it locks in and use spanner to firmly screw it.

## 6.2 Operation

- Note: ensure proper PPE are worn during operation.

### 6.2.1 Grinding and Sanding

- Firmly hold the tool and turn it on and let it reach optimal speed, then apply the wheel or disc to the workpiece.
- In general, keep the edge of the wheel or disc at an angle of about 15° to the workpiece surface.
- For any new wheel disc, do not work the grinder in a forward direction as it may cut into the workpiece. Once the edge of the wheel has been rounded off by use, the wheel is now ready to be worked in both forward and backward direction.
- Never force or apply excessive pressure when sanding. The weight of the tool for pressure is sufficient. Excess pressure will slow down the tool. Coarser grit disc can be used to achieve a faster material removal rate.

## 6.2.2 Abrasive cutting discs/diamond blades

- Abrasive cutting discs/diamond blades cuts at 90° angle to the workpiece.
- Note that diamond blades usually require less feeding pressure than abrasive discs.

## 6.2.3 Wire cup and wheel brushes

- Don't apply excessive pressure when using wire brushes, as this may prevent the tips from hitting the surface but rather cause the side of the wire to whip the surface. This reduces cleaning action.
- Slowly move your way around the surface, avoid brushing over sharp edges and corners as this may cause damage to the brush.

# 7. Maintenance

- Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use.

## Before starting the grinder

### Ensure that

- The power supply cable and plug are in perfect condition.
- The ON/OFF switch works properly with the power supply disconnected.
- All the parts of the tool have been assembled properly and that there are no signs of damage.
- The ventilation slots are not obstructed.
- Regularly clean the casing of the tool, use a damp cloth to wipe down.
- Compressed air can be used to remove dust and debris that might clog the cooling fan. By also blowing through the air vents.
- Regularly inspect the carbon brushes. Brushes shorter than 5 mm long would require replacement. Dust is one of the leading factors that cause brushes to wear out prematurely, especially if you are working on abrasive concrete.
- After installing the replacement carbon brushes, allow them to run without load for some minutes.
- Ensure the on/off switch is working properly at all times.
- Ensure to use the correct attachment or disc for your angle grinder and ensure it is correctly fitted as this will improve the tool's performance.
- Check the power supply cord for any possible breakages or cuts. In case of any damage have this repaired before use. Inspect the auxiliary handle that all is still in order.
- In case you experience the issue of overheating, simply reduce the load from the tool. Don't turn off the tool, let it run at a normal/standard speed to promote cooling.

**Warning: Always ensure that the tool is switched off and the plug is removed from the**







power source before making any adjustments or maintenance procedures.

## 8. Troubleshooting

<b>Trouble</b>	<b>Problem</b>	<b>Suggested Action</b>
1. Angle grinder will not start	1.1 Power cord not plugged in 1.2 Power fault, fuse or circuit breaker tripped 1.3 Cord damaged 1.4 Faulty switch 1.5 Faulty motor	1.1 Ensure that the cord is connected to the power supply 1.2 Check the power supply 1.3 Use authorized service centre to repair or replace 1.4 Use authorized service centre to repair or replace the switch 1.5 Use authorized service centre to repair or replace the motor
2. Poor performance	2.1 Extension cord too long or undersized 2.2 The tool is overheating- breaker tripped 2.3 Discs not cutting	2.1 Use an extension cord heavy enough to carry the current 2.2 Turn off the tool and let it cool down to room temperature. Inspect and clean the ventilation slots. 2.3 Replace with a new cutting disc.
3. Vibration or abnormal noise	3.1 Incorrectly fitted accessories 3.2 Loose screws	3.1 Ensure that the accessory is secured onto the spindle. 3.2 Ensure that all fixing screws are fully tightened.
4. Overheating	4.1 Reduce load from tool	4.1 Let the tool run at no load for a few minutes to have the built in fan cool down the motor.

## 9. Meaning of symbols on labels



	Meets relevant EU requirements.
	Electrical waste, see below
	Second class protection equipment. Double insulation
	Use certified eye and ear protection with a sufficient level of protection.
	Use certified respiratory protection with adequate level of protection
	Read the instructions before use.

## 10. Disposal of waste

### Packaging materials

Dispose of packaging materials in the appropriate container for sorted waste.

### Unusable angle grinder

According to EU Directive 2012/19, unusable electrical equipment must not be disposed of in municipal waste, but must be submitted for environmentally friendly disposal to the collection of electrical equipment. Information on collection points for electrical equipment and collection conditions can be obtained at the municipal office or from the seller.



# EC Declaration of Conformity

Manufacturer Levior s.r.o. • Tovačovská 3488, CZ-750 02 Přerov declares that the subsequently marked devices, based on their concept and construction, as well as the designs listed on the market, meet the requirements of the European Union listed below. This declaration is issued under the sole responsibility of the manufacturer.

## Subjects of declaration-product identification:

Product: Angle Grinder

Model No.: S1M-HJ2118-230

Item No.: 28215

comply with the following harmonized standards, including their amending annexes, if any, by which conformity with the following harmonization provisions is declared:

### 2006/42/EC:

EN 60745-2-3:2011+A2:2013+A11:2014+A12:2014+A13:2015

EN 60745-1:2009+A11:2010

### 2014/30/EU:

EN 55014-1:2017; EN 55014-2:2015; EN IEC 61000-3-2:2019 ;



EN 61000-3-3:2013+A1:2019

The completion of technical documentation 2006/42/EC was performed by Ondřej Marek with his registered office at the manufacturer's address.

The technical documentation (2006/42/EC) is available at the manufacturer's address.

**Place and date of issue of the EC declaration of conformity:** Přerov, 30.5.2023

Person authorized to draw up the EC declaration of conformity on behalf of the manufacturer(signature, name, function):

  
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