



125MM ANGLE GRINDER

HM600BMC



INSTRUCTION MANUAL

Please keep this instruction manual for future reference

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Accessories.

- 1 - 4 ½"/115mm Grinding Disc.
- 1 - 4 ½"/115mm Cutting Disc
- 1 - 4 ½"/115mm Diamond cutting disc for masonry
- 1 - Outer flange
- 1 - Pin wrench
- 1 - Pair carbon brushes




CAUTION.

Carefully read through this entire instruction manual before using your new power tool. Take special care to heed the Cautions and Warnings

TECHNICAL DATA

We have made every effort to ensure accuracy of information in this manual at time of going to print.

Specification

Angle grinder 4 1/2"/115mm	<u>Product</u>
Voltage	230V- 50Hz
Input power	800w
No load speed	12000rpm
Disc diameter	4 1/2"/Ø115mm
Disc bore diameter	Ø22.2
Spindle thread	M14
Protection class	
Weight	1.9k

This tool is double insulated. There are two independent barriers of insulation to protect you from the possibility of electric shock.

NOISE AND VIBRATION DATA

Typical weighted Vibration	2.5m/s ²
A weighted sound pressure	83dB(A)
A weighted Sound power	98dB(A)
Sound pressure is over	85dB(A)

The sound intensity level for the operator may exceed 85dB(A) and sound protection measures are necessary.

You must always wear the following if operating this power tool.

- Wear goggles.
- Wear ear defenders.
- Wear a breathing mask.
- Wear safety gloves
- Wear safety shoes

SAFETY INSTRUCTIONS

To use this tool properly, you must observe the safety regulations, the assembly instructions and the operating instructions to be found in this manual. All persons who use and service the machine have to be acquainted with this manual and must be informed about any potential hazards.

Children and infirm people must not use this tool. Children should be supervised at all times if they are in the area in which the tool is being used. It is also imperative that you observe the accident prevention regulations in force in your area. The same applies for general rules of occupational health and safety.

The manufacturer shall not be liable for any changes made to the tool nor damage resulting from such changes.

Even when the tool is used as prescribed it is not possible to eliminate all residual risk factors. The following hazards may arise in connection with the tools construction and design:

Contact with disc

Kickback of work piece and parts of work piece.

Disc fracture.

Catapulting of disc pieces.

Damage to hearing if effective ear defenders are not worn.

Damage to the lungs if an effective dust mask is not worn.

Do not use discs that are damaged or cracked.

Always remove the plug from the mains socket before making any adjustments or maintenance, including changing disc.

WARNING

When using electric power tools, basic safety precautions including the following, should always be followed to reduce the risk of fire electric shock and personal injury. Also please read and heed the advice given in the additional important safety instructions.

READ ALL THESE INSTRUCTIONS BEFORE OPERATING THIS PRODUCT AND SAVE THESE INSTRUCTIONS.

1. **Keep the work area clean and tidy.** Cluttered work areas and benches invite accidents and invite injury.
2. **Consider work area environment.** Do not expose power tools to rain. Do not use power tools in damp or wet locations. Keep the work area well lit. Do not use power tools where there is risk to cause fire or explosion. Do not use power tools in the presence of flammable liquids or gases.
3. **Guard against electric shock.** Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).
4. **Keep children and visitors away from the work area.** All visitors and onlookers, especially children and infirm persons should be kept well away from where you are working. Do not let others in the vicinity make contact with the tool or extension cord?
5. **Store idle tools.** When not in use, tools should be stored in a dry, high or locked up place out of reach of children.
6. **Do not force the tool.** The tool will do the job better and safer at the rate for which it was designed.
7. **Use the right tool.** Do not force small tools or attachments to do the job best handled by a heavier duty tool. Do not use tools for purposes not intended; do not use circular saws to cut tree limbs or logs.
8. **Dress correctly.** Do not wear loose clothing or jewellery; they can be caught in moving parts. Rubber gloves and non-slip footwear are recommended when working outdoors. Wear a protective hair covering to contain long hair.
9. **Use safety accessories.** Safety glasses and ear defenders should always be worn. A face or dust mask is also required.
10. **Connect dust extraction equipment.** If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used.
11. **Do not abuse the power cord.** Never carry the tool by the cord or yank it to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.
12. **Secure the work piece.** Use clamps or a vice to hold the work piece. It is safer than using your hand and it frees both hands to operate the tool.
13. **Do not overreach.** Keep proper footing and balanced at all times.
14. **Maintain and Look after your tools with care.** Keep cutting tools clean and sharp for better and safer performance. Follow the instructions for lubrication and accessory changes. Inspect tool cords periodically and if damaged have it repaired by an authorized service facility. Inspect extension cords periodically and replace, if damaged. Keep tool handles dry, clean and free from oil and grease.
15. **Disconnect tools. Switch off the power.** Disconnect the plug from the power point before servicing and when changing accessories such as blades, bits and cutters, and when the tool is not in use.
16. **Remove adjusting keys and wrenches.** Form the habit of checking to see that the keys and adjusting wrenches are removed from the tool before switching the tool on.
17. **Avoid unintentional starting.** Ensure that the switch is in the OFF position before plugging the

18. tool to the power supply. Do not carry a plugged in tool.
19. with your finger on the switch
20. **Use outdoor rated extension cords.** When a tool is used outdoors, use only extension cords that are intended for outdoor use and are so marked.
21. **Stay alert.** Watch what you are doing. Use common sense. Do not operate a power tool when you are tired.
22. **Check for damaged parts.** Before using a tool, check that there are no damaged parts, if a part is slightly damaged carefully determine if it will operate properly and perform its intended function otherwise replace. Check for alignment of moving parts binding of moving parts, breakage of parts, free running of moving parts, proper mounting and any other conditions that may affect the operation of the tool. A guard or other parts that are damaged should be properly repaired or replaced by an authorised service centre, unless otherwise indicated in this instruction manual. Defective switches must be replaced by authorised service facility. Do not use the tool if the switch does not turn the tool on and off correctly.
23. **Warning.** The use of any accessory or attachment, other than those recommended in this instruction manual, may present a risk of personal injury.
24. **Have your tool repaired by a qualified person.** This electric tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts; otherwise this may result in considerable danger to the user.
25. **Do not let the tool run unattended.** Always wait until your power tool has come to a complete stop before leaving it. Then turn off at mains and remove the plug from the power outlet.

WARNING

The use of an accessory or attachment, other than those recommended in this instruction manual may present a risk of personal injury

The tool must be used only for its prescribed purpose any use other than those mentioned in this manual will be considered a case of misuse. The user and not the manufacture shall be liable for any damage or injury resulting from such cases of misuse.

ADDITION SAFETY RULES FOR ANGLE GRINDER

- Fully unwind cable drum extensions to avoid potential overheating.
- When an extension cable is required, you must ensure that it has the right ampere rating for your power tool and is in safe electrical condition.
- Ensure your mains supply voltage is the same as your tool rating plate voltage.
- Always switch off before you put the angle grinder down.
- Keep the area free of tripping hazards.
- Do not let anyone under the age of 18 years operate this tool.
- Rags, cloths, cord, string and the like should never be left around the work area.
- If you are interrupted when operating the tool, complete the process and switch off before looking up.
- Periodically check that all the nuts, bolts and other fixings are properly tightened.
- Abrasive wheels shall be stored and handled with care in accordance with manufacturers instructions
- Do not store materials or equipment above a machine in such a way that they could fall into it.
- Do not use discs having a maximum permissible speed below the tool rated marked RPM.
- Inspect the grinding wheel before use, do not use chipped, cracked or otherwise defective products. Check the disc before mounting it into the angle grinder. Check by striking it with a wooden handle whilst balancing the disc on your finger. Listen to the sound it makes if it rings it is ok if it sounds dull it may be cracked and needs to be replaced.
- Ensure that mounted wheels and points are fitted in accordance with the manufacturer's instructions.
- When the disc is installed, run it for at least a minute to ensure that it does not have a fault. It is always advisable to stay out of the line of the disc when testing or in general use.
- Do not use a disc marked with a lower RPM than that of the no load speed shown on the rating plate.
- Use discs only of the prescribed diameter.
- Never try to operate the angle grinder without the guard in place.
- Do not use separate reducing bushings or adaptors to adapt large hole abrasive wheels.
- For tools intended to be fitted with threaded hole wheel, ensure that the thread in the wheel is long enough to accept the spindle length;
- Do not use cutting off wheel for side grinding.
- Ensure that sparks resulting from use do not create a hazard e.g. do not hit persons, or ignite flammable substances.
- Ensure that ventilation openings are kept clear when working in dusty conditions. If it should become necessary to clear dust, first disconnect the tool from the mains supply (use non metallic objects) and avoid damaging internal parts.
- If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid hazard

- Do not secure the angle grinder in a vice or work bench and use it as a static grinder. It leads to serious injury.
- Never apply excessive pressure to the disc it might shatter causing personal injury.
- Ensure the work piece to be ground or cut, is held tight in the vice or other clamping system.
- Always use both hands and ensure a good handgrip on the grinder before proceeding with any work
- Make sure that the disc is not in contact with the work surface when you start the grinder.
- Be careful not to damage the spindle or either of the disc flanges. Damage to these parts could result in disc damage or breakage.
- Only use good quality grinding and cutting discs. Cheap or poor quality discs tend to glaze up which loads the motor and can damage it. Use discs for their designated purpose only. For instance, do not use cutting discs for grinding or metal wheels for masonry.
- Watch out for flying sparks. Hold the tool at an angle of approximately 15° to 30° to the work piece surface when using discs.
- Let the disc do the grinding or cutting at a reasonable feed, as overloading will occur if too much pressure is applied and the disc slows resulting in inefficient cutting and possible damage to the motor.
- When using the grinder, use safety equipment including safety goggles or shield, ear protection dust mask and protective clothing including safety gloves.

Wear goggles

Wear ear defenders

Wear a breathing mask

Wear safety gloves

Wear safety shoes

UNPACKING

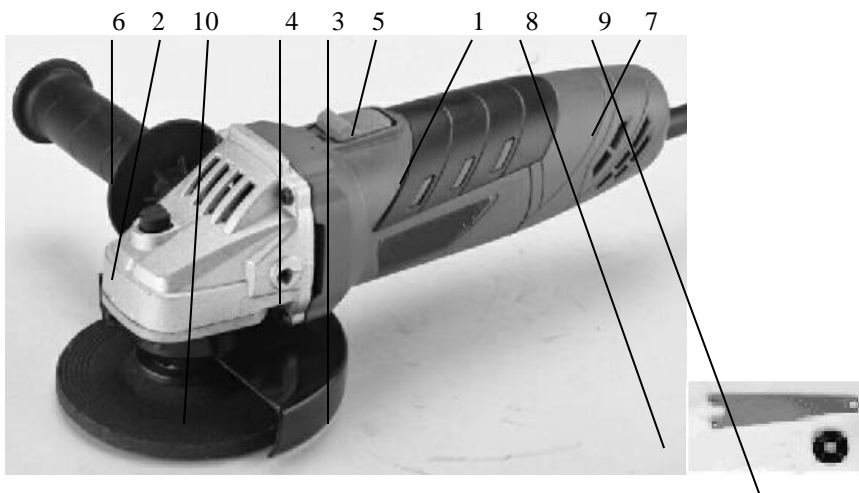
Due to modern production techniques, it is unlikely that your power tool is faulty or that a part is Missing. If you find anything wrong do not operate the tool until the parts have been replaced or the Fault has been rectified. Failure to do so could result in serious personal injury.

KNOW YOUR PRODUCT

Before using the angle grinder, familiarise yourself with all the operating features and safety requirements.

Use the tool and accessories only for the application intended all other applications are expressly ruled out.

- | | | | |
|---|----------------------------|----|--------------|
| 1 | Motor housing | 7 | Power cord |
| 2 | Spindle lock button | 8 | Pin wrench |
| 3 | Disc guard | 9 | Outer flange |
| 4 | Mounting points for handle | 10 | Inner flange |
| 5 | On/Off switch | | |
| 6 | Side handle | | |



CONTROLS

- 1/ Looking at the angle grinder from the top, the spindle lock (2) is located at the front top right hand side.
- 2/ There are attachment points (4) for the handle (6) at either side of the front of the housing, Attach the handle in the position that suits the planned operation.
- 3/ An arrow imprinted on the front housing indicates the direction of the rotation of the Disc.
- 4/ The on/off switch (5) is located on the top of the motor housing.
- 5/ The adjustable disc guard (3) is on the underside of the grinder as is the outer flange (9), grinding disc (10)

Operation

This angle grinder can be used for polishing cutting and grinding.

- 1/ To start the grinder first ensure that the work you are going to do has the right



disc for the job.

- 2/ When using cutting or grinding disc, insure that the guard (3) and tools are in good condition.
- 3/ Position the guard (3) when using disc so that it will deflect hot sparks away from operator.
- 4/ Plug the cord set into the mains outlet.
- 5/ Push the on/off switch (5) forward and up over the latching ramp to lock the switch on
- 7/ Allow the grinder to start and attain full speed before bringing the grinder to the work piece.
- 8/ When using cutting and grinding discs hold the grinder at 15° to 30° to the work surface moving slowly
- 9/ Hold the grinder firmly while it is switched on and only apply gentle pressure to the workpiece little more than the weight of the tool should be applied to give the best and most efficient material removal. Forcing and excessive pressure can cause dangerous disc fracture or damage to the tool
- 10/Avoid flying sparks. And ensure they do not hit any inflammable materials, as they are very hot and could cause personal injury or a fire.
- 11/Once you have finished the job you are doing, **press** the back of the switch (5) and lift it over the latching ramp to stop the angle grinder.
- 12/If a person comes to you while you are operating the machine do not turn round or look up until you have released the trigger and the machine has come to a stop and you have put the machine down then you are safe to communicate with that person.
- 13/**WARNING.** The grinder continues for a few seconds after the trigger has been released, so be careful when placing the tool down, make sure it has stopped.

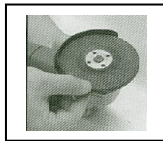
FITTING A GRINDING DISC

Caution. Switch off the grinder and disconnect it from the power point

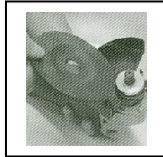
- 1/ Turn the angle grinder on to its back and press the spindle lock button (2)



- 2/ Rotate the spindle unit until it locks.



- 3/ Insert the pins of the wrench (8) into the holes in the outer flange (9) and remove it and the old disc.

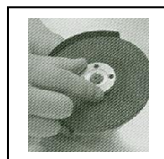


- 4/ Do not remove the inner flange (11)

- 5/ Select the type of disc needed for the job on hand.

- 6/ Clean the flanges and check the new disc.

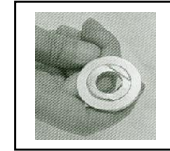
- 7/ Holding the angle grinder with the spindle facing upwards, check that the inner flange is on the spindle and correctly located.



The two-machined flat sections must face the angle grinder and locate in the appropriate position on the spindle.

- 8/ Place the grinding disc onto the spindle with label facing the angle grinder.

The hole in the disc should locate onto the spindle and fit firmly into the spigot section of the inner flange.



- 9/ Screw the outer flange (9) with the protruding spigot section facing the angle grinder. The spigot section must locate with the hole in the grinding disc.

- 10/ Hand tighten the outer flange until the disc is secure.



- 11/ Press the spindle lock button (2) and tighten the flange with the wrench.

- 12/ Turn the new disc by hand, ensuring that it is tightly secured and that it rotates fully and does not wobble unduly.

- 13/ Run the angle grinder under no load for at least one minute to ensure the new disc is in good condition. Make sure you are wearing all the safety items mentioned in The Safety Rules and that you face the grinder away from you.

CAUTION

Do not use excessive force to clamp the disc. It could crack and cause failure during use.

GENERAL INFORMATION

FITTING A CUTTING DISC

- 1/ Use the same procedure as for the grinding disc except use the outer flange the other way round.
The spigot section should face away from the disc.

WARNING

Do not immerse the disc into any type of lubrication including water.
This angle grinder is designed as a dry grinder/cutter/polisher.
Failure to observe this warning could result in a fatal shock.

GENERAL INSPECTION

- 1/ Regularly check that all the fixing screws are tight, particularly the outer flange. They may vibrate loose over time.
- 2/ The supply cord of the tool and any extension cord used should be checked frequently for damage if damaged have the cord set replaced by an authorised service facility. Replace the extension cord if necessary.

LUBRICATION

The grease in the gearbox will require replacement after extensive use of the tool, please refer to an Authorised service agent to provide this service.

MAINTANCE

- 1/ Store the tool, instruction manual and accessories in a secure place. In this way you will always have all the information and parts ready to hand.
- 2/ Keep the tool's air vents unclogged and clean at all times.
- 3/ Remove dust and dirt regularly. Cleaning is best done with compressed air or a rag.
- 4/ Never use caustic agents to clean plastic parts.

CAUTION

Do not use cleaning agents to clean the plastic parts of the tool. A mild detergent on a damp cloth Is recommended. Water must never come in contact with the tool.

SYMBOLS

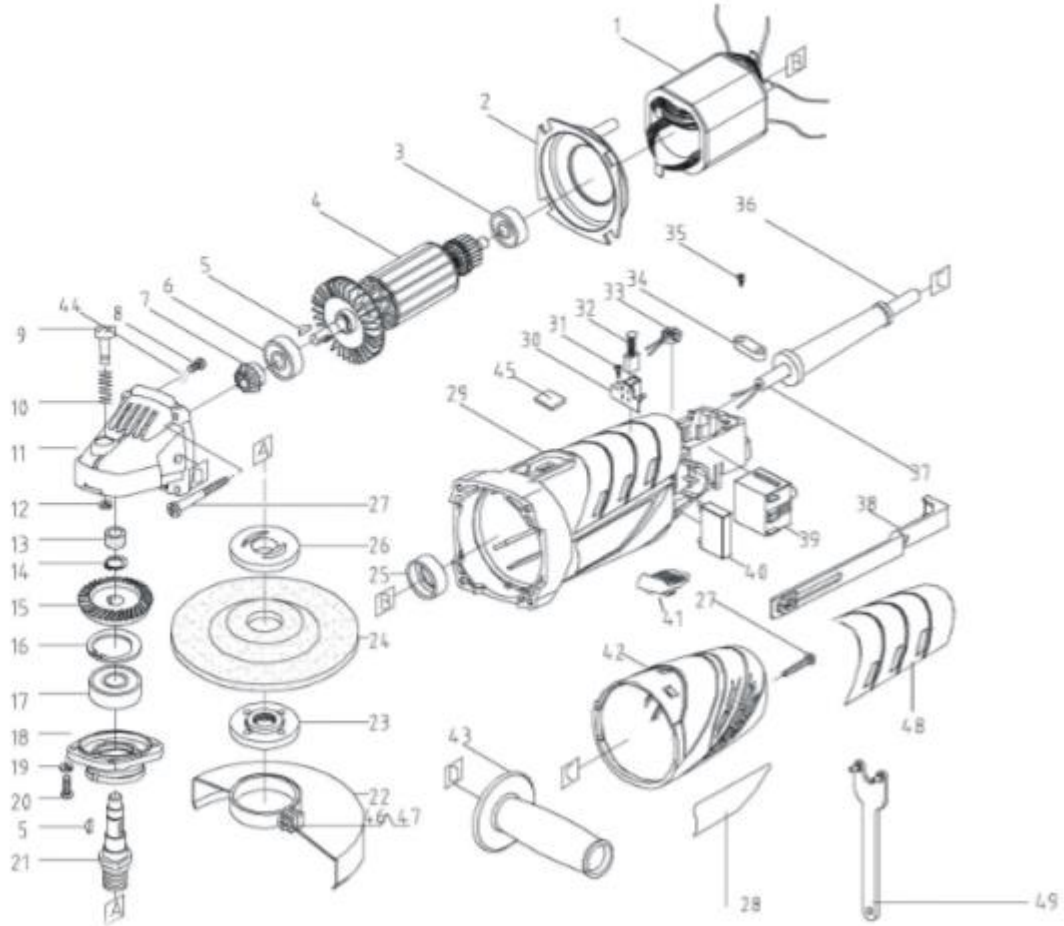


Some of the following symbols may be used on the tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

	Speed of normal load
n_o	no load speed
V	volts
A	amperes
Hz	hertz
W	watt
Kw	kilowatts
h	Hours
Min	minutes
s	seconds
.../min	Revolutions, oscillations or reciprocations per minute
	alternating current
	three-phase alternating current
	three-phase alternating current with neutral
	direct current
	class II construction
	splash proof construction
	watertight construction
	protective earthing at earthing terminal, Class I tools
	alternating or direct current
μF	microfarads
Pa	pascals
l	litres
Kg	kilograms
\emptyset	Diameter
0	Off position
	Arrow
	Warning symbol
N/cm^2	newtons per square centimeter

SAVE THESE INSTRUCTIONS FOR REFERENCE

PARTS DIAGRAM



PARTS LIST

spare parts list

NO	Component	NO	Component
1	Stator	29	Plastic body
2	Wind laps	30	Brush holder
3	Ball bearing	31	Screw
4	Rotor	32	Carbon brush
5	Semicircle button	33	Inductance
6	Ball bearing	34	Cable clip
7	Small gear	35	Screw
8	Screw	36	Cable
9	Locking nut	37	Cable inner wire
10	Spring	38	Shank of switch
11	Gear box	39	Switch
12	Spring	40	Capacitance
13	Steel bushing	41	Switch nut
14	Wedge reed	42	Rare body
15	Big gear	43	Side handle
16	Wedge reed	44	Spring washer
17	Ball bearing	45	Brush holder cover
18	Bottom cover	46	Screw
19	Spring Washer	47	Screw
20	Screw	48	Back insert
21	Output shaft	49	Flange spanner
22	Shield		
23	Press board		
24	Disc		
25	Bearing cover		
26	Press board		
27	Screw		
28	Label		