



2400W
MAGNESIUM
230MM (9")
ANGLE GRINDER

AG230M
INSTRUCTION MANUAL

GMC[®]
GLOBAL MACHINERY COMPANY

2 YEAR
REPLACEMENT WARRANTY

Black	Magenta	Code: AG230M		
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Full 2 Years Home Use Warranty

Whilst every effort is made to ensure your complete satisfaction with this tool, occasionally, due to the mass manufacturing techniques, a tool may not live up to our required level of performance and you may need the assistance of our service department.

This product is warranted for a 2-year period for home domestic use from the date of the original purchase. If found to be defective in materials or workmanship, the tool or the offending faulty component will be replaced free of charge with another of the same item. A small freight charge may apply.

The warranty replacement unit is only made available by returning the tool to the place of purchase with a confirmed register receipt. Proof of purchase is essential. We reserve the right to reject any claim where the purchase cannot be verified.

This warranty does not include damage or defects to the tool caused by or resulting from abuse, accidents, alterations or commercial or business use.

It also does not cover any bonus accessories unless the tool is a GMC Platinum Professional model.

Please ensure that you store your receipt in a safe place. Conditions apply to the above warranty.

Dear Customer

If you require any help with your product, whether it is a Warranty claim, spare part or user information, please phone our Help Line for an immediate response. Phone 1300 880 001 in Australia or 0800 445 721 in New Zealand.

Introduction

Your new GMC power tool will more than satisfy your expectations. It has been manufactured under stringent GMC Quality Standards to meet superior performance criteria.

You will find your new tool easy and safe to operate, and, with proper care, it will give you many years of dependable service.

CAUTION. Carefully read through this entire Instruction Manual before using your new GMC Power Tool. Take special care to heed the Cautions and Warnings.

Your GMC power tool has many features that will make your job faster and easier. Safety, performance, and dependability have been given top priority in the development of this tool, making it easy to maintain and operate.

Environmental protection



Recycle unwanted materials instead of disposing of them as waste. All tools, hoses and packaging should be sorted, taken to the local recycling centre and disposed of in an environmentally safe way.

Description of symbols

The rating plate on your tool may show symbols. These represent important information about the product or instructions on its use.



Wear hearing protection.

Wear eye protection.

Wear breathing protection.



Double insulated for additional protection.



Conforms to relevant standards for electromagnetic compatibility.

Specifications

Nominal voltage:	230–240V ~ 50 Hz
Input power:	2400W
No load speed:	6000 min ⁻¹
Insulation class:	Double insulated
Disc diameter:	230mm (9")
Spindle:	M14
Disc bore diameter:	22.2mm
Net weight:	6kg
Sound pressure level:	94.5 dB(A)

General safety rules

WARNING. Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term “power tool” in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

Save these instructions

1. Work area

- a. **Keep work area clean and well lit.** Cluttered and dark areas invite accidents.
- b. **Do not operate power tools in explosive atmospheres,** such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2. Electrical safety

- a. **Power tool plugs must match the outlet. Never modify the plug in any way.** Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool.** Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

- e. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

3. Personal safety

- a. **Stay alert, watch what you are doing and use common sense when operating a power tool.** Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
 - b. **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
 - c. **Avoid accidental starting.** Ensure the switch is in the off position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
 - d. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
 - e. **Do not overreach.** Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
 - f. **Dress properly. Do not wear loose clothing or jewellery.** Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
 - g. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust related hazards.
- #### 4. Power tool use and care
- a. **Do not force the power tool.** Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.

- b. Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. 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.
- d. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation.** If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f. Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, 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.

5. Service

- a. Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

Additional safety rules for angle grinders

- 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.
- Always switch off before you put the angle grinder down.
- Do not let anyone under 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 nuts, bolts and other fixings are properly tightened.
- 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 for the ring and do not use if dull, as the disc may be cracked.
- When the disc is installed, run it for at least one 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 when using the tool.
- 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.
- Do not use the angle grinder for buffing or polishing under any circumstances.
- Never try to operate the angle grinder without the guard in place.
- Do not secure the angle grinder in a vice or work bench and use it as a static grinder. It can lead 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 the auxiliary handle and ensure a good grip on the grinder housing with one hand and the handle with the other hand before proceeding with any work.
- Make sure that the disc is not in contact with the work 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 breakage.
- Do not press the spindle lock button whilst the spindle is turning.
- Only use good quality grinding and cut off discs. Cheap 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 on masonry.
- Watch out for flying sparks. Hold the tool at an angle of approximately 15° to 30° to the work piece surface.
- 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.

ALWAYS WEAR EYE PROTECTION

Wear goggles

Wear hearing protection

Wear a breathing mask

Accessories

The GMC AG230M Angle Grinder is supplied with the following accessories as standard:

- Pin wrench
- Auxiliary handle
- 230mm Metal grinding disc
- Instruction manual

Unpacking

Due to modern mass production techniques, it is unlikely that your GMC 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 only for the applications intended. All other applications are expressly ruled out

1. Motor housing
2. Spindle lock button
3. Disc guard
4. Quick release guard lever
5. Mounting points for the multi-position auxiliary handle
6. On/off switch
7. Lock-off catch
8. Multi-position auxiliary handle
9. Rotating handle
10. Rotating handle release button
11. Pin wrench
12. Disc
13. Outer flange
14. Outer flange washer – for flat discs
15. Inner flange
16. Brush-wear/overload LED indicator



Setting up

Multi-position auxiliary handle

1. Screw the multi-position auxiliary handle (8) into the most suitable mounting point (5) (top, left side or right side) to suit the planned operation. (Fig. A)
2. Press the rotating handle release button (10) and turn the rotating handle (9) to suit the planned operation. (Fig. B)

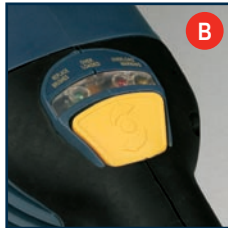
NOTE. The rear handle (9) can be rotated to the left or right. It must be "locked" into one of the three preset positions: central, 90° to the left or 90° to the right. It must not be used at any position in between these three preset positions as it might rotate during use and create a hazard.

NOTE. Grinding operations normally require the angle grinder to be held with the grinding disc at an angle of 20° to 30° between the tool and the plane of the workpiece whilst cutting operations normally require the angle grinder to be held with the cutting disc at right angles to the workpiece. Take the time to find the best combination of auxiliary handle and rotating handle positions to suit the task on hand. It can make a considerable difference to the levels of convenience and safety of operation.

Disc guard

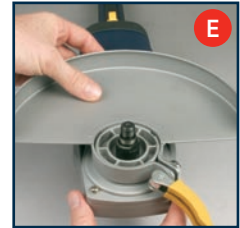
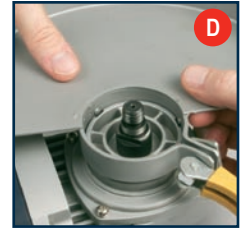
WARNING. Switch off the grinder and disconnect it from the power point.

NOTE. Grinding operations normally require the angle grinder to be held with the grinding disc parallel to the plane



of the workpiece whilst cutting operations normally require the angle grinder to be held with the cutting disc at right angles to the workpiece. Take the time to find the best combination of front handle and slimline handle positions to suit the task on hand. It can make a considerable difference to the levels of convenience and safety of operation.

1. Open the quick release guard lever (4). (Fig. C)
2. Position the two lugs on the inside of the central guard ring in the vertical slot in the spindle cover and press the guard onto the spindle cover. (Fig. D)
3. Twist the guard to the appropriate position for either grinding or cutting. (Fig. E)
4. Lock the guard in position with the quick release guard lever. (Fig. C)



Operation

LED Overload protection system

Overloading the tool means the tool is being leaned on excessively during use, slowing down the speed of the tool. As a result of the motor slowing down, the internal fan does not work to its full capacity.

The LED Overload protection system (16) will alert you when it is overloading.

The grinder will warn you when you are approaching overload by flashing the Yellow light.

If you continue to ignore the yellow light or do not see it, the red light will come on and the grinder will immediately come to a stop. When this occurs, wait a brief moment then restart the grinder, however, take additional care not to press on the tool too much.

Single speed with soft start

This grinder is fitted with soft start technology. This feature operates when you start the tool by slowly increasing the power, significantly reducing any "kick" when the grinder is switched on reducing the strain on the user.

By reducing the switch on surge it also helps prolong the life of the tool.

Switching on and off

This angle grinder can be used for grinding and cutting steel, stone or ceramic workpieces such as pipe, box sections, angle iron, steel bar, house bricks and tiles. Do not attempt to grind wood or a soft metal such as lead. The material will quickly "fill" the disc and render it useless.

1. Before starting the grinder, put on safety glasses and check to make sure that the disc, guard and the tool are in good condition and correctly fitted.
2. Plug the cordset into the power socket.
3. Hold the tool firmly in anticipation of the start up torque.
4. Push the lock-off catch (7) forward (Fig. F) and pull on the on/off switch (6). (Fig. G)



5. Allow the grinder to start and attain full speed before bringing the disc to the workpiece.
6. To prevent a new grinding disc from digging into the workpiece, first draw the grinder across the workpiece towards the operator. Once the leading edge of the disc is slightly worn down, grinding can be conducted in either direction.
7. Once the grinding or cutting is finished, remove the disc

from the workpiece.

8. Release the on/off switch (6) to stop the grinder.

NOTE. The disc continues to turn for a few seconds even though the switch is turned off. Keep hands well away from the moving disc.

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

Holding and guiding the tool

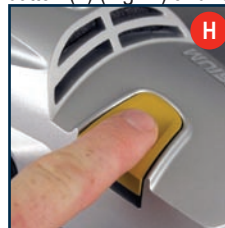
1. Always clamp the workpiece.
2. Do not overload the tool so that the disc slows down. Let the tool do the work rather than applying pressure. The weight of the tool alone provides sufficient pressure.
3. Cutting and grinding discs become very hot when in use. Take care not to touch them until they have cooled down.
4. Hold the tool securely and make sure that you have full control at all times.
5. During a cutting operation, maintain an angle of 30° to 40° between the tool and the workpiece.
6. During grinding, maintain an angle of 20° to 30° between the tool and the workpiece.

Replacing a disc

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

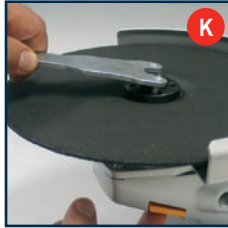
Depressed Disc

1. To remove the disc, press and hold the spindle lock button (2) (Fig. H) and rotate the disc by hand until the



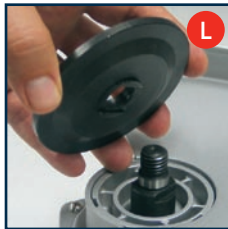
spindle lock engages and locks the spindle. Use the pin wrench (11) to unscrew the outer flange (13). Note that this flange unscrews anticlockwise. (Fig. I)

- Remove the outer flange (13) (Fig. J) and the used



disc.(Fig. K)

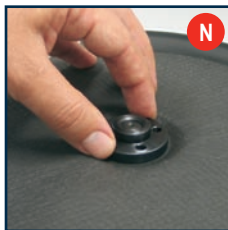
- Clean the flanges (13 and 15) and check the new disc.
- Ensure that the non-threaded inner flange (15) is on the spindle and located correctly. The two machined flat sections on the inner flange (15) must face the angle grinder and locate in the matching positions on the spindle. (Fig. L)



Fit the new disc, ensuring that the disc is correctly located on the inner flange.

NOTE. Make sure that you select the correct disc for the planned application, i.e. fit a metal grinding disc for cutting metal, a masonry grinding disc for grinding masonry, a cutting disc for cutting, etc.

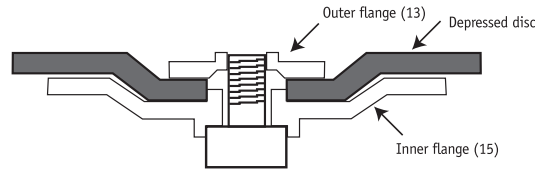
- Fit the outer flange (13) with the raised centre section facing outwards as



shown in the picture below.

(Figs. M and N)

IMPORTANT. The depressed centre disc must be correctly located on the inner flange. Refer to the assembly drawing below.



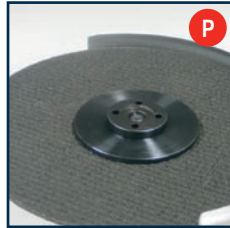
- Turn the new disc by hand, ensuring that it is tight in the flanges and that it rotates fully and does not wobble unduly.
- Run the angle grinder no load for at least one minute to ensure the new disc is in good condition. Make sure you are wearing all the safety gear and that you face the grinder away from you.

Flat Disc

- To remove the disc, press and hold the spindle lock button (2) and rotate the disc by hand until the spindle lock engages and locks the spindle. Use the pin wrench (11) to unscrew the outer flange (13). Note that this flange unscrews anticlockwise.
- Remove the outer flange (13) and the used disc.
- Clean the flanges (13 and 15) and check the new disc.
- Ensure that the non-threaded inner flange (15) is on the spindle and located correctly. The two machined flat sections on the inner flange (15) must face the angle grinder and locate in the matching positions on the spindle. Fit the new disc, ensuring that the disc is correctly located on the inner flange.

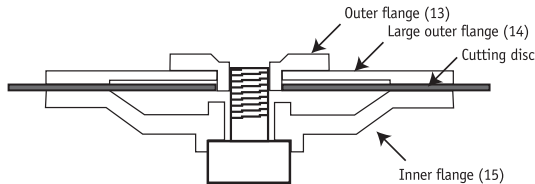
NOTE. Make sure that you select the correct disc for the planned application, i.e. fit a metal grinding disc for cutting metal, a masonry grinding disc for grinding masonry, a cutting disc for cutting, etc.

- Fit the large outer flange (14) and ensure that the raised



portion is pressing against the disc. (Fig. O) Then fit the outer flange (13) making sure that the raised centre section is pointing towards the disc. (Fig. P)

IMPORTANT. The raised centre portion of the flange nut **MUST BE** correctly positioned as it locates the grinder/cutting wheel. Refer to the assembly drawing below.



- Turn the new disc by hand, ensuring that it is tight in the flanges and that it rotates fully and does not wobble unduly.
- Run the angle grinder no load for at least one minute to ensure the new disc is in good condition. Make sure you are wearing all the safety gear and that you face the grinder away from you.

Disc Selection

Grinding Discs – 230mm x 22.2mm bore x 6mm.

Generally used on steel and high grade steel, also available for stone, concrete and aerated concrete.

Cutting Discs – 230mm x 22.2mm bore x 3mm.

Generally used on steel, high grade steel and stainless steel also available for stone, concrete and aerated concrete.

Diamond Blade Disc – 230mm x 22.2mm bore x 2.2mm.

These types of discs are generally used in masonry cutting applications. They are suited for cutting concrete, tiles, marble, granite and sand stone.

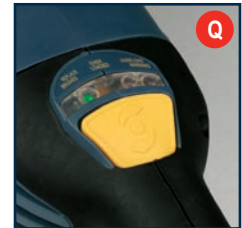
LED brush-wear indicator

The LED Brush-wear indicator (16) provides early warning that the carbon brushes within the tool require replacement.

When the carbon brushes are worn down, it will result in a current drop creating inefficient motor power which can result in costly repair.

The LED Brush-wear indicator warns the user when a green light appears on the LED display.

The carbon brushes must be replaced soon. When the carbon brushes are replaced, the next time the tool is used the green light will not appear. (Fig. Q)



CAUTION. The carbon brushes should be replaced by a qualified technician at an authorised service centre.

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.

Power cord maintenance

If the supply cord needs replacing, the task must be carried out by the manufacturer, the manufacturer's agent, or an authorised service centre in order to avoid a safety hazard.

Cleaning

1. Keep the tool's air vents unclogged and clean at all times.
2. Remove dust and dirt regularly. Cleaning is best done with a rag. Wear safety goggles or an eye shield and gloves whilst cleaning.
3. Re-lubricate all moving parts at regular intervals.
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 into contact with the tool.

General inspection

Regularly check that all the fixing screws are tight. They may vibrate loose over time.

Carefully read the entire Instruction Manual before using this product.

Before returning this product for a Warranty Claim or any other reason

Please Call 1300 880 001 (Australia) or 0800 445 721 (New Zealand)

When you make your call, please have the following information at hand:

■ GMC Product Type ■ GMC Product Code

A GMC Service Engineer will take your call and, in most cases, will be able to solve your problem over the phone.

You are welcome to use this phone-in service to make suggestions or give comments about any GMC product.

With continuing product development changes may have occurred which render the product received slightly different to that shown in this instruction manual.

The manufacturer reserves the right to change specifications without notice.

Note: Specifications may differ from country to country.

 Helpline 1300 880 001 (Australia) or 0800 445 721 (New Zealand)

Register your warranty on line at www.gmcompany.com and enter your receipt details.

The GMC 777 Helpline operates from 7am to 7pm, 7 days a week (EST).

This allows you to contact GMC directly with any queries and technical questions you have regarding products.

Save this Manual for future reference

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Telephone (03) 8346 1100 Fax (03) 8346 1200

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