GMC®

GLOBAL MACHINERY COMPANY

INSTRUCTION MANUAL

1020W

1/4" Variable Speed Plunge Router

2 YEAR REPLACEMENT WARRANTY

30 DAY SATISFACTION GUARANTEE

• Melbourne • Perth • Auckland • Hong Kong • Shanghai
• Taipei • New York • Verona • London • Paris

R1020

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Contents

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.

If you need direction of what constitutes a free of charge warranty claim, please review the guide given on the rear of the Receipt Holder. An indication is given as to the types of claim that are permissible, and those that are not.

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.

Descriptions 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 safety standards.

Specifications

Voltage:	*230–240V ~ 50Hz*
Power rating:	*1020W*
No load speed:	*18,000–30,000min^{-1}*
Collet size:	*6.35mm (1/4")*
Max plunge depth:	*50mm*
Weight:	*3.3Kg*
A weighted sound pressure:	*85 dB(A)*

General safety instructions

WARNING. *Read and understand 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 below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.*

Save these instructions

Work area

- ***Keep work area clean and well lit.*** *Cluttered and dark areas invite accidents.*
- ***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.*
- ***Keep children and bystanders away while operating a power tool.*** *Distractions can cause you to lose control.*

Electrical safety

- ***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.*
- ***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.*
- ***Do not expose power tools to rain or wet conditions.*** *Water entering a power tool will increase the risk of electric shock.*
- ***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.*
- ***When operating a power tool outdoors, use an outdoor extension cord suitable for outdoor use.*** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*

Personal safety

- ***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.*
- ***Use safety equipment.*** *Always wear eye protection. Safety equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
- ***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.*
- ***Remove any adjusting key or wrench before turning the tool on.*** *A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.*
- ***Do not overreach.*** *Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.*
- ***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.*
- ***If devices are provided for the connection of dust extraction and collection facilities ensure that these are connected and properly used.*** *Use of these devices can reduce dust-related hazards.*

Power tool use and care

- ***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.*

- ***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.*
- ***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.*
- ***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.*
- ***Maintain power tools.*** *Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.*
- ***Keep cutting tools sharp and clean.*** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- ***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 intended could result in a hazardous situation.*

Service

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

Additional safety rules for electric routers

- *Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.*
- *Fully unwind cable drum extensions to avoid potential overheating.*
- *When an extension cable is required, you must ensure it has the right ampere rating for your power tool and is in a safe electrical condition.*
- *Ensure your mains supply voltage is the same as your tool rating plate voltage.*
- *Your tool is double insulated for additional protection against a possible electrical insulation failure within the tool.*
- *Always check walls, floors and ceilings to avoid hidden power cables and pipes.*
- *After long working periods external metal parts and accessories could be hot.*
- *Always wear eye and ear protection and use a dust mask.*
- *Handle router bits with care, they can be extremely sharp.*
- *Check the bit carefully for signs of damage or cracks before use. Replace cracked or damaged bits immediately.*
- *Remove all nails, screws and other objects from the workpiece. You can damage the bit and the tool by cutting into a nail or other metal. It can also present a safety hazard.*
- *Always use both handles and make sure that you have a good grip on the router before proceeding with any work.*
- *Keep your hands away from the rotating bit.*
- *Make sure that the bit is not in contact with the workpiece when you switch the machine on.*
- *Before using the tool to make a cut, switch on and let it run for a while. Watch for vibration or wobbling that could indicate an improperly installed bit.*
- *Take notice of the direction of rotation of the bit and the direction of feed.*

- *Do not leave the machine running unattended. Operate the tool only when controlled by both hands.*
- *Always switch off and wait until the bit has come to a complete standstill before removing the machine from the workpiece.*
- *Do not touch the bit immediately after operation. It may be extremely hot and could burn your skin.*
- *Rags, cloths, cord, string and the like should never be left around the work area.*
- *Use safety equipment including safety goggles or shield, ear protection, dust mask and protective clothing including safety gloves.*

WARNING. *Before connecting a tool to a power source (power point receptacle, outlet, etc.) be sure that the voltage supply is the same as that specified on the nameplate of the tool. A power source with a voltage greater than that specified for the tool can result in serious injury to the user, as well as damage to the tool. If in doubt, do not plug in the tool. Using a power source with a voltage less than the nameplate rating is harmful to the motor.*

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 manufacturer shall be liable for any damage or injury resulting from such cases of misuse.

The manufacturer shall not be liable for any changes made to the tool nor for any 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 tool's construction and design:

- *Damage to hearing if effective earmuffs are not worn.*
- *Harmful emissions of wood dust when the machine is used in closed rooms. Always use supplementary dust extraction.*
- *Always remove the plug from the mains socket before making any adjustments or maintenance, including changing the bit.*
- *Contact with the bit.*
- *Reaching into the housing whilst the tool is running and making contact with the bit.*
- *Kickback of workpiece and parts of workpiece.*
- *Bit fracture.*
- *Catapulting of faulty pieces from the bit.*
- *Do not use bits that are deformed or cracked.*
- *Always remove the plug from the mains socket before making any adjustments or maintenance, including changing the bit and setting the depth of cut.*

Contents of carton

The router is supplied with the following accessories as standard:

- *1/4" (6.35mm) collet*
- *Parallel guide*
- *Template guide*
- *Dust extraction adaptor*
- *Spanner*

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.

Assembly

The GMC Electric Router is packed, fully assembled except for the dust extraction adaptor and parallel and template guide.

Know your product

1. *Left handle*
2. *Right handle*
3. *Variable speed dial*
4. *Depth gauge*
5. *Depth gauge locking knob*
6. *Micrometer depth adjustment*
7. *Depth lock lever*
8. *6-position turret stop*
9. *On/off switch*
10. *Spindle lock*
11. *Collet nut*
12. *Base plate*
13. *Dust extraction adaptor*
14. *Parallel guide locking knob (x2)*
15. *Parallel guide*
16. *Wrench*
17. *Template guide*
18. *Collet*

Installing and removing router bits

CAUTION. *Always ensure that the tool is switched off and the plug is removed from the power point before making any adjustments.*

NOTE. *The router is supplied with the 6.35mm (1/4") collet fitted.*

WARNING. *This router has a 6.35mm (1/4") collet and only accepts 6.35mm (1/4") router bits. Failure to follow this advice can lead to serious injury as the router bit may not be properly secured in the collet, or may damage the collet.*

1. *Loosen the collet nut (11) by depressing and holding the spindle lock (10) and then rotating the collet nut.*
2. *Insert the router bit ensuring that the shaft of the bit goes all the way into the collet.*


3. *Tighten the collet nut assembly by depressing and holding the spindle lock and then tightening the collet nut with the supplied spanner (16).*


WARNING. *Do not tighten the collet nut without a bit in place or you may break the collet.*

CAUTION. *Ensure the bit is firmly secured before commencing operation.*

Installing and removing collets

CAUTION. *Always ensure that the router is switched off and unplugged from the mains supply before installing or removing a collet.*

NOTE. *This router only accepts 6.35 (1/4") collets.*

1. *Depress and hold the spindle lock (10) to stop the spindle from turning.*
2. *Whilst holding the spindle lock lock, loosen the collet nut by rotating it using the supplied spanner.*


3. *Remove the collet nut followed by the collet.*
4. *Install the new collet into the assembly; this is sometimes easier if the router is plunged to its full depth.*


5. *Install the collet nut and tighten by hand.*
6. *Firmly tighten the collet nut by depressing and holding the spindle lock and then tightening the collet nut using the supplied spanner.*

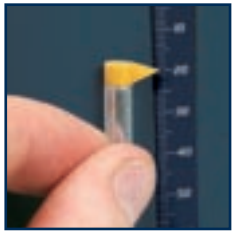
WARNING. *Do not tighten the collet nut without a bit in place or you may break the collet.*

Adjusting the cutting depth

CAUTION. *Always ensure that the router is switched off and unplugged from the mains supply before adjusting the depth of cut.*

1. *Place the router on a flat surface and loosen the depth gauge locking knob (5).*
2. *Allow the depth gauge (4) to make contact with one of the turret stops (8).*

3. *Loosen the depth lock lever (7) and lower the machine body until the router bit just touches the flat surface.*
4. *Tighten the depth lock lever to maintain the position of the bit just touching the flat surface.*



5. *Take note of the measurement on the scale of the depth gauge.*
6. *Raise the depth gauge and tighten using the depth gauge locking knob.*

The difference in distance between the new measurement and the original measurement will be equivalent to the depth of cut.

7. *Use the micrometer depth adjustment (6) for precise setting of cutting depth. One complete turn of the micrometer depth adjustment knob represents 1mm.*
8. *Loosen the depth lock lever and raise the machine body.*

9. *When making a subsequent cutting operation, the final depth of cut will be reached when the depth gauge touches the selected turret stop.*
10. *The turret stop (8) has six turrets. By rotating the turret stop it is possible to quickly and easily set the depth at six different levels. This procedure is particularly useful when you wish to make a deep cut in a number of stages.*

Switching on and off

1. *After you have set up the work and are ready to cut your wood, plug in the router at the power point.*
2. *To start the motor, press the on/off switch (9) and hold it pressed.*
3. *To stop the machine, release the on/off switch.*

CAUTION. *Allow the bit to come to a complete standstill before setting the router down.*

Variable speed control

1. *To increase or decrease the speed of the router, rotate the variable speed dial (3). The speed increases as the numbers on the dial increase.*
2. *Adjust the speed to suit different working materials. The tool works quicker and smoother at different speeds when working in different woods or in plastic or aluminium.*

3. *Determine the optimum speed by making a trial cut in a scrap piece of material.*

NOTE. *Using the correct speed for the job increases the life of the bit.*

Making a cut

1. *Place the base plate on the workpiece ensuring that the bit is not in contact with the material to be cut.*
2. *Switch on the router and allow the bit to reach maximum speed.*
3. *Lower the bit into the workpiece surface, keeping the base plate flush and advancing smoothly until cutting is complete.*

4. *When edge cutting, the workpiece surface should be on the left side of the bit in the feed direction.*
5. *Keep the cutting pressure constant, taking care not to crowd the router so that the motor speed slows excessively.*
6. *On exceptionally hard woods or problem materials it may be necessary to make more than one pass at various settings to achieve the desired depth of cut.*
7. *To avoid "bit chatter" cuts need to be made in an anti-clockwise direction for external cuts and in a clockwise direction for internal cuts.*

CAUTION*. Moving the machine too fast may cause a poor quality of cut and can damage the bit or the motor. Moving the machine too slowly may burn or mar the cut. The proper feed rate will depend on the bit size, the type of material being cut and the depth of the cut. Practice first on a scrap piece of material to gauge the correct feed rate and the cut dimensions.*

CAUTION*. Always use two hands to hold the router.*

CAUTION. *Where possible, clamp the workpiece to the bench.*

Using the parallel guide

The parallel guide (15) is an effective aid to cutting in a straight line when chamfering or grooving.

Install the parallel guide in the right side of the tool in the feed direction. This will help you keep the guide flush with the side of the workpiece.

1. *Loosen the parallel guide locking knobs (14), hold the guide against the workpiece edge and slide the router to the desired position. Re-tighten knobs.*
2. *If the distance between the side of the workpiece and the cutting position is too wide, or the side of the workpiece is not straight, firmly clamp a straight board to the workpiece and use this as a guide against the router base.*

Using the dust extraction adaptor

1. *Hold the dust extraction adaptor (13) in place over the base of the router.*
2. *Secure the dust extraction adaptor with the two screws provided.*
3. *Attach a suitable workshop vacuum or dust collector to the outlet of the adaptor.*

CAUTION*. Some larger router bits may not be able to be used in conjunction with the dust extraction adaptor.*

Using the template guide

The template guide (17) can be used in various ways:

- *Producing duplicates of a particular design of an original shape*
- *In conjunction with a template, producing decorative features*
- *Repetitive cutting shapes*

If you wish to make your own templates it is best to use a hardwood such as plywood. Use a piece that is just thicker than the depth of the template guide. Allow for the thickness of the guide in your template to ensure that the workpiece is cut to the correct size.

***NOTE**. Always use the dust extraction adaptor when working with the template guide.*

Maintenance

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

Keep the tool's air vents unclogged and clean at all times.

Regularly check to see if any dust or foreign matter has entered the grills near the motor and around the switches. Use a soft brush to remove any accumulated dust. Wear safety glasses to protect your eyes whilst cleaning.

Re-lubricate all moving parts at regular intervals.

If the body of the tool needs cleaning, wipe it with a soft damp cloth. A mild detergent can be used but nothing like alcohol, petrol or other cleaning agent.

Never use caustic agents to clean plastic parts.

***CAUTION**. Water must never come into contact with the tool.*

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.

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.

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 our products.

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Save this Manual for future reference.