

INSTRUCTION MANUAL

2HP & 2-1/2HP

24 Litre & 40 Litre

Air Compressors



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

AC24L/AC40L

030505 AC24/40L Ed5

Contents

Warranty	2
Warning labels explained	3
Introduction	4
Environmental protection	4
Description of symbols	4
Specifications	4
General safety instructions	5
Additional safety rules for air compressors	6
Know your product	9
Unpacking	10
Assembly	10
Pre-start routine	11
To start & stop the compressor	11
Operation	12
Troubleshooting	13
Maintenance	14
General Inspection	15
Cleaning	15
Repairs	15





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.

Warning labels explained

On the tank of your air compressor you will notice various warnings about the operation of the compressor. These warnings and the procedures associated with them are explained fully in this manual on the following pages. Please take note of these. They are important for your safety and that of others in the vicinity.



without first filling with oil.

Page 11



Unit starts
automatically.
Switch off power supply,
remove plug & relieve
air pressure prior to
commencing service
tasks.



Keep oil level as shown:

Use only oil grade specified in instruction manual.



Air Inlett

When filter becomes dirty or oily, replace cartridge. Refer to instruction manual.

Page 11



Page 14

Page 11



Read instruction manual prior to starting unit.

This equipment operates from AC mains only.



High voltage used on this equipment. Switch off power supply & remove plug from mains before removing any covers. Ensure mains outlet is adequately rated for this unit.



Air discharged from this unit is not suitable for human consumption.



Test the safety relief valve daily.

Refer the instruction manual.

Page 4 Page 4

Page 6 Page 14

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.



Conforms to relevant standards for electromagnetic compatibility.

Specifications

Parameter	Model AC24L		Model AC40L
Power	2hp/1.5kW		2.5hp/1.8kW
Voltage	230–240Vac ~ 50Hz		
No load speed	2850 RPM		2850 RPM
Current	7A		8A
Output at 0.8MPa (115psi)	0.1m3/m	in	
Discharge pressure	0.8MPa (115psi)		
Restart pressure	0.5MPa (70psi)		
Tank capacity	24 litres		40 litres
Air outlet size	6.35mm ((1/4")	
Dimensions	600mm x x 640mm	360mm	685mm x 300mm x 720mm
Net weight	27kg		35kg
Cut-in pressure (fac	tory set)	0.6MPa	(85psi)
Cut-out pressure (fo	actory set)	0.8MPa	(115psi)
Maximum output p	ressure	0.8MPa	(115psi)
Free air delivery		117 l/mi	in (4.15 cfm)
Pump displacement	<u>.</u>	206 l/mi	in (7.3 cfm)

General 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 its 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.

Warning. When using power tools, basic safety precautions should always be taken 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.

- 1. Keep the work area clean and tidy. Cluttered work areas and benches invite accidents and injury.
- 2. Consider the environment in which you are working.

 Do not use power tools in damp or wet locations. Keep
 the work area well lit. Do not expose power tools to
 rain. Do not use power tools in the presence of
 flammable liquids or gases.
- 3. Keep 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.
- **4. Store tools safely.** When not in use, tools should be locked up out of reach.
- 5. Do not force the tool. The tool will do the job better and safer working at the rate for which it was designed.
- 6. Use the correct tool for the job. Do not force small tools or attachments to do the job best handled by a heavier duty tool. Never use a tool for a purpose for which it was not intended.

- 7. 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. If you have long hair, wear a protective hair covering.
- **8. Use safety accessories.** Safety glasses and earmuffs should always be wom. A face or dust mask is also required if the sanding operation creates dust.
- 9. Do not abuse the power cord. Never pull the cord to disconnect the tool from the power point. Keep the cord away from heat, oil and sharp edges.
- 10. Secure the work piece. Use clamps or a vice to hold the work piece. It is safer than using your hand and frees both hands to operate the tool.
- **11. Do not overreach.** Keep your footing secure and balanced at all times.
- 12. Look after your tools. Keep tools sharp and clean for better and safer performance. Follow the instructions regarding lubrication and accessory changes. Inspect tool cords periodically and, if damaged, have them repaired by an authorised service facility. Inspect extension cords periodically and replace them if damaged. Keep tool handles dry, clean and free from oil and grease.
- **13. Disconnect idle tools.** Switch off the power and disconnect the plug from the power point before servicing, when changing accessories and when the tool is not in use.
- **14. Remove adjusting keys and wrenches.** Check to see that keys and adjusting wrenches are removed from the tool before switching on.
- 15. Avoid unintentional starting. Always check that the switch is in the OFF position before plugging in the tool to the power supply. Do not carry a plugged in tool with your finger on the switch.
- 16. 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.

- 17. Stay alert. Watch what you are doing. Use common sense. Do not operate a power tool when you are tired.
- 18. 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. Check for alignment of moving parts, binding of moving parts, breakage of parts, proper mounting and any other conditions that may affect the operation of the tool. A part that is damaged should be properly repaired or replaced by an authorised service facility, unless otherwise indicated in this Instruction Manual. Defective switches must be replaced by an authorised service facility. Do not use a tool if the switch does not turn the tool on and off correctly.
- 19. Guard against electric shock. Prevent body contact with grounded objects such as water pipes, radiators, cookers and refrigerator enclosures.
- 20. Use only approved parts. When servicing, use only identical replacement parts. Use an authorised service facility to fit replacement parts.

Additional safety rules for air compressors

Wamings. Before connecting a tool to a power source (mains switch 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 hamful to the motor.

Always remove the plug from the mains socket before making any adjustments or maintenance, including renewing the lubricating oil.

 To reduce the risk of fire or explosion, never spray flammable liquids in a confined area. It is normal for the compressor motor and pressure switch to produce

- sparks during use. If sparks come into contact with petrol vapours or solvents, they may ignite the vapours and cause a fire or explosion.
- Always operate the compressor in a well ventilated area.
 Do not smoke while spraying. Do not spray where sparks or flames are present. Keep the compressor as far away from the spray area as possible.

The solvents trichloroethane and methylene chloride can chemically react with the aluminium used in some paint spray guns and form an explosion. If these solvents are used, ensure that only stainless steel spray equipment is connected. The compressor is not affected by the use of these solvents.

- Never directly inhale the compressed air produced by a compressor and do not use it for charging breathing tanks.
- Do not use welding equipment in close proximity to the compressor. Do not weld anything to the air tank of the compressor: this could dangerously weaken the tank and will void the warranty.
- Do not use the compressor outdoors when it is raining or on a wet surface; either situation could cause an electric shock.
- Always shut off the compressor after use and before servicing. Push the on/off knob down, wait for the pressurised air to bleed from the tank from the release valve and then remove the electrical plug from the power supply.
- Check the maximum pressure rating of any tools or accessories that you intend using with the compressor. The output pressure of the air from the compressor must be regulated so that it never exceeds the rated pressure of the tool or accessory.
- To avoid the risk of bums and injury from moving parts, do not operate the compressor with the safety shield removed. Allow hot parts to cool before handling or servicing.
- Be certain to read all the labels on the containers of

paint or other materials to be sprayed. Closely follow all safety instructions. Use a respirator mask if there is a chance that you might otherwise inhale the spray material. Carefully check the effectiveness of any respirator mask you intend using.

- Always wear safety goggles or glasses when using the air compressor. Never point the nozzle of an accessory towards any part of your body or towards another person.
- Do not attempt to adjust the pressure switch or the release valve located under the pressure switch cover.
- Drain the moisture from the tank daily. It will help prevent corrosion.
- Pull the ring on the safety valve daily to ensure that it operating properly and to clear any possible instructions.
- Keep the compressor at least 300mm from the nearest wall to ensure adequate ventilation for cooling purposes.
- Before transporting the compressor make sure that the pressurised air is bled from the tank and that the compressor is firmly secured.
- Protect the air hose and cordset from damage. Inspect for weak or worn spots regularly and replace if necessary.
- Do not use an extension cord with this product. Use additional air hose instead of an extension cord to prevent power loss and possible damage to the motor. Use of an extension cord voids the warranty/
- After long working periods external metal parts could be hot.
- Always press the on/off button down to switch off the compressor before switching off the power or removing the power pluq.
- Do not use the compressor without first checking the oil level. It must be close to the red circle as viewed on the oil gauge.

Note. The compressor is supplied empty of oil. It must be filled with oil before first use.

- After using the compressor, switch off the on/off button, disconnect the power supply and open the outlet valve to release the pressure.
- Do not attempt to remove any part of the machine whilst it is under pressure.
- Ensure that the lubricating oil is clean and that the oil level is maintained at the correct level. Replace the oil as indicated in the Maintenance section of this Manual.
- Use safety equipment including safety goggles or shield, ear protection, breathing or respirator mask and protective clothing.

Wear goggles. Wear earmuffs. Wear a breathing or respirator mask.

Never apply the outlet air of this compressor directly on to any part of a person's body. Do not attempt to block the air outlet with your finger or any part of your body.

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 the lungs if an effective breathing mask is not worn.
- Damage to hearing if effective earmuffs are not worn.
- Damage to the eyes if effective safety goggles or shield are not worn.

Warning.

In the event that an air line is cut or broken, the air supply must be turned off at the compressor. A broken air line which is not supported is extremely dangerous and can whip around very quickly, both with the capability of striking people, and blowing foreign particles into the air. Do not attempt to catch the air line but immediately keep bystanders well clear and turn off the air supply to the hose, turn off the compressor at the On / Off button, and then remove the hose from the compressor.

Know your product

- 1. Handle
- 2. Pressure switch cover
- 3. On/off switch
- 4. Direct outlet valve
- 5. Direct outlet pressure gauge
- 6. Regulating knob
- 7. Regulated outlet valve
- 8. Regulated outlet pressure gauge
- 9. Safety valve
- 10. Non-return valve
- 11. Drain cock
- 12. Air tank
- 13. Wheel (x 2)
- 14. Safety shield
- 15. Oil filling cap
- 16. Air filter assembly
- 17. Oil level glass
- 18. Oil drain plug (not shown)



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 handle of the AC40L model must be fitted in the following manner:

- Loosen the grub screw in each of the handle fixing holes.
- 2. Insert the two ends of the handle into the fixing holes.





3. Tighten the grub screws to secure the handle in place. Wheels

Fit the wheels as follows:

- for the 24 litre compressor, push each wheel firmly onto the axle until it "snaps" into position.
- for the 40 litre compressor, first insert an axle pin through the wheel and then through the hole in the bracket under the tank. Next, fit the spacer on the axle pin followed by the flat washer, split washer and nut. Tighten the nut. Repeat for the second wheel.

Rubber feet

Fit the two rubber feet on the bracket on the front underside of the tank using the screws, washers and nuts supplied.

Warning. The air compressor must be filled with oil before first use.

To prevent possible spillage of oil during transport, the compressor oil is supplied in a separate container. It must be added to the compressor before turning the compressor on. Failure to add the oil will cause non-repairable damage to the compressor and will void the warranty.

- 1. Remove the plastic oil filling cap (15) located on the top of the crank case of the compressor housing.
- 2. Use the oil supplied to fill the crank case until the oil level as seen in the oil level glass (17) is up to the mid point of the red circle.





3. Replace the oil filling cap (15). Ensure the cap is fully fitted and firmly in position.

Warning. The air filter must be added before first use. Failure to fit the air filter will damage the compressor and will void the warranty.

- Remove the plastic air filter plug from the head of the compressor.
- 5. Carefully screw the air filter assembly (16) into the threaded hole taking care not to cross the thread.





6. Tighten firmly by hand only.

Pre-start routine

- 1. Ensure that the location for the compressor is clean, dry and well ventilated.
- 2. Ensure the crank case has been filled with oil and is at the correct level, and the air filter has been fitted.
- 3. Open the direct output valve (4) and the regulated output valve (7).





Open the valve by sliding the outer sleeve fully forward. To close the valve, slide the outer sleeve backward towards the compressor.

4. Start the compressor by following the procedure in the section "To start and stop the compressor". For the first time of operation, run the compressor for 10 min with no load to ensure all parts are well lubricated.

Warning. Be aware that presurised air will be discharged from the two outlets and care should be taken that this discharge is not directed towards you the operator, or other persons within the area.

To start & stop the compressor

- 1. Check the rating label on the compressor indicates 230V-240V.
- 2. Plug in the mains cable of the compressor to a standard 240V houshold power point and turn on.
- 3. To start the compressor, lift the On/Off switch (3) on the pressure switch cover (2).
- 4. To stop the compressor, push the On/Off switch (3) down.





Operation

- 1. The pressure in the tank is controlled by the action of the pressure switch located under the pressure switch cover (2). When the set maximum pressure is reached the pressure switch activates and the motor is switched off. The pressure then decreases as the air is used by the connected tool until the set minimum is reached after which the pressure switch causes the motor to switch on again. The operator of the compressor should be well aware that during use of the compressor the motor will start and stop under the influence of the rising or falling pressure in the tank. The motor will start without any warning.
- 2. The maximum and minimum pressures are factory set and the operator should not try to change them.
- 3. You can connect an accessory to either the direct outlet valve (4) and/or the regulated outlet valve (7). The regulated outlet is the one on the left when you face the front of the compressor.
- 4. The pressure of the regulated outlet [as shown on the regulated outlet pressure gauge (8)] can be changed by turning the regulating knob (6). Rotate the knob clockwise to increase pressure and anti-clockwise to decrease pressure.



Note. To obtain the correct output reading on the regulated output gauge, the air must be flowing through the outlet.

The regulating valve should be adjusted and the gauge read with the outlet valve open and the air being discharged from the regulated outlet.

To increase the air pressure, rotate the regulating valve clockwise. To decrease the pressure, rotate the regulating valve anti-clockwise.

Note. If you do not allow the air to discharge while you are setting the regulator, the pressure as indicated on the regulated outlet gauge will be incorrect. This gauge ONLY indicates the correct pressure while air is being discharged from the outlet.

The discharge air from the right hand (opposite) outlet (4) is not regulated and will discharge air at tank pressure. The gauge for this outlet (5) will show the correct pressure in the tank with or without the air being discharged.

- 5. On completion of the task, i.e. when you have finished using the compressor, or when you are leaving the compressor unattended, turn off the compressor in the following way:
- Press down the on/off switch (3).
- Wait for the pressurised air to bleed from the tank from the release valve under the pressure switch cover (2).
 Note. When you press the button down you should hear a short air discharge (Approx 1/2 second)
- Switch off the electrical power supply and remove the electrical pluq.
- Pull the ring on the safety valve (9) to ensure all the pressurised air is released from the tank, or open the drain cock to release the pressure from the tank.

Warnings.

- 1. Never attempt to remove any part of the compressor whilst the tank is under pressure.
- Never attempt to remove any electrical component whilst the compressor is connected to the power supply. Switch off the power and remove the electrical pluq.
- 3. Do not adjust the safety valve.
- 4. Do not use an electrical extension cable.



- 5. If the release valve under the pressure switch cover (2) fails to operate when the on/off button is pressed down, switch the power supply off and determine the nature of the fault.
- 6. Ensure that the lubricating oil is clean and that the oil level is maintained at the mid point of the red circle in the oil level glass (17)..
- 7. Take care when discharging air from the tank, i.e. from the safety valve, the drain cock or the air outlet.

 Compressed air can be extremely dangerous. Take care the discharge air does not cause dust, stones or any other foreign particles to be blown through the air and that the air is discharged in a safe manner.

Troubleshooting Trouble Possible cause Suggested remedy Motor will not run, running too slow or 1. Power fault or supply voltage too 1. Check the power supply becoming excessively hot low 2. Power cord too long or too thin 2. Use authorised service centre to replace the power cord 3. Faulty pressure switch 3. Use authorised service centre to repair or replace the switch 4. Faulty motor 4. Use authorised service centre to repair or replace the motor 5. Main compressor sticking/tight 5. Use authorised service centre to repair or replace faulty parts. Main compressor sticking/tight 1. Moving parts damaged by heat due Use authorised service centre to check to insufficient lubrication crankshaft, bearings, con rod, piston rings, etc and replace where necessary. 2. Moving parts damaged or blocked by foreign particle 1. Use authorised service centre to Vibration or abnormal noise 1. Loose part check and repair if necessary 2. Use authorised service centre to 2. Foreign body in main compressor check and clean if necessary 3. Use authorised service centre to 3. Piston connecting with the valve increase size of gasket seat 4. Use authorised service centre to 4. Moving parts excessively worn repair or replace

Insufficient pressure or decreased outlet capacity	1. Motor running too slow	Use authorised service centre to check and repair if necessary	
	2. Dirty air filter cartridge	2. Clean or replace the filter cartridge	
	3. Leaking safety valve	3 – 7. Use authorised service centre to check and repair if necessary	
	4. Leaking pipe		
	5. Damaged gasket		
	6. Damaged or carbon coated valve seat		
	7. Damaged piston ring or cylinder	_	
Excessive oil consumption	1. Oil level too high	1. Maintain the oil at the correct level	
	2. Hole in oil filling cap (14) blocked	2. Check and clean	
	3. Piston ring and/or cylinder worn or damaged	Use authorised service centre to check and repair if necessary	

Maintenance

 After the first 10 hours of working, empty the crank case of oil and refill with clean oil by removing the crank case oil plug (left hand side of the crank case at the bottom)

Note. Use good quality compressor lubricating oil.

- SAE30 or L-DAB 100 over 10°C
- SAE10 or L-DAB 68 under 10°C
- 2. After each subsequent 500 hours of operation, again drain the oil and refill the crank case with clean oil.
- 3. After each day of operation, use the drain cock (11) under the tank to drain off any condensate.
- 4. Regularly check the air filter cartridge inside the air filter assembly (17) and replace the cartridge when necessary.



5. Check daily the operation of the safety valve. This check should be performed when the tank contains close to max pressure in the tank.

To check the valve, pressurise the tank, and pull the ring OUTWARDS on the safety valve.

Air should discharge from the valve.

Release the ring of the safety valve. When the ring is released the air discharge must stop.

Warnings.

Safety glasses must be worn when performing this test.

Do not have your face close to the safety valve when performing this test as air will discharge from the valve at a high force.

If the safety valve does not operate correctly in any way as described above, turn off the compressor immediately and have the compressor and safety valve checked and tested at an authorised Service centre.

DO NOT CONTINUE TO USE THE COMPRESSOR IN ANY WAY IF THE SAFETY VALVE DOES NOT WORK AS ABOVE.

General inspection

- 1. Regularly check that all the fixing screws are tight.
- The supply cord of the tool should be checked frequently for damage. If damaged, have the cordset replaced by an authorised service facility to avoid a 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 soft brush or a rag.
- 3. Re-lubricate all moving parts at regular intervals.
- 4. If the body of the compressor needs cleaning, wipe it with a soft damp cloth. A mild detergent can be used but nothing like alcohol, petrol or other cleaning agent.
- 5. Never use caustic agents to clean plastic parts.

Caution. Water must never come into contact with the tool

Repairs

 Only an authorised service centre should replace the cordset or carry out other repairs. If the cordset is damaged or worn, have it repaired or replaced by an authorised service centre.

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.



45–55 South Centre Road Melbourne Airport Victoria, Australia 3045 Tel: (03) 8346 1100 Fax: (03) 8346 1200





Save this Manual for future reference.