

# 30L & 40L AIR COMPRESSORS

EAC30 & EAC40 Instruction Manual





GLOBAL MACHINERY COMPANY

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#### **Warranty Power Tools**

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 repaired or replaced free of charge with another of the same item. A small freight charge may apply. 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 items or included accessories. Only the power tool is covered under this warranty.

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

Please ensure that you store your receipt in a safe place. Conditions apply to the above warranty. For full details of the warranty terms and conditions please refer to our website — www.gmcompany.com

For prompt service we suggest you log your service request online - www.gmcservice.com.au, should you not have access to the internet, please contact our service department on 1300 880 001 (Australia) or 0800 445 721 (New Zealand).

#### 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.





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









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.

#### 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**

	EAC30		EAC40
Power:	2HP/1600W		
Voltage:	230–240V ~ 50Hz		
No load speed:	2850 mi	n-1	2850 min <sup>-1</sup>
Discharge pressure:	0.8 MPa	a(115 psi)	0.8 MPa(115 psi)
Tank capacity:	30 litres		40 litres
Air outlet size:	6.35mm	(1/4")	6.35mm (1/4")
Net weight:	29kgs		34kgs
Cut-in pressure (factor	ory set):	0.6MPa (8	5psi)
Cut-out pressure (fac	ctory set):	:0.8MPa (1	15psi)
Maximum output pre-	ssure:	0.8MPa (1	15psi)
Free air delivery:	127 l/mi (4.5 CFI	• •	150 l/min (5.4 CFM)
Pump displacement:	206 l/mi (7.2CFM		216 l/min (7.65CFM)

#### **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.

- 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.
- Use safety accessories. Safety glasses and earmuffs should always be worn. A face or dust mask is also required if the sanding operation creates dust.
- 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.
- Guard against electric shock. Prevent body contact with grounded objects such as water pipes, radiators, cookers and refrigerator enclosures.
- 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

**WARNING.** 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 harmful 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 burns and injury from moving parts, do not operate the compressor with the safety cover 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 plug.
- 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 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.

#### Contents of carton

- 400ml of oil in a sealed container
- 2 Wheel assemblies (2 each of wheels, wheel bolts, nuts)
- Air filter
- 2 Rubber feet assemblies

#### **Know your product**

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



#### Unpacking

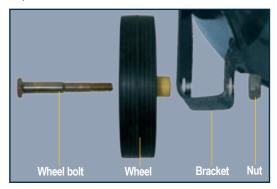
Due to modern mass production techniques, it is unlikely that your GMC Power Tool is faulty or that a part is missing. If you find anything wrong, do not operate the tool until the parts have been replaced or the fault has been rectified. Failure to do so could result in serious personal injury.

#### **Assembly**

#### Wheels

#### Fitting the wheels

- 1. To fit the wheels (12) first insert the wheel bolt through the wheel.
- 2. Fit the wheel assembly through the holes in the bracket under the tank.
- Completely tighten the nut from the underside of the wheel with spanner while holding the outer side nut with another spanner.
- 5. Repeat for the second wheel.



#### Rubber feet

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



#### Oil

**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 plug (14) located on the top of the crank case of the compressor housing.





- Use the oil supplied to fill the crank case until the oil level as seen in the oil level glass (16) is up to the mid point of the red circle.
- 3. Replace the oil filling plug (14). Ensure the plug is fully fitted and firmly in position.

#### Air filter

**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.

To fit the air filter (15) you need to locate the inlet hole on the right side of the compressor housing then carefully hand tighten the thread of the the air filter in a clockwise direction until tight.



#### Maintaining the air filter

 To clean the air filter insert you need to take the air filter (15) apart first. Undo the wing nut, and remove the cover along with the washer from the air filter.



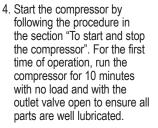


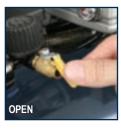
- 2. Push out the air filter insert and soak it in warm soapy water, rinse and wring dry.
- Replace the air filter insert cartridge, then the air filter cover, washer, then wing nut.

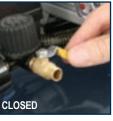
#### **Pre-start routine**

- Ensure that the location for the compressor is clean, dry and well ventilated.
- Ensure the crank case has been filled with oil and is at the correct level, and the air filter has been fitted.

 Open the regulated output valve (6). Open the valve by rotating the air tap (18) so it is in line with the air outlet (refer to the OPEN picture).
 To close the valve, rotate the air tap so it is facing to the right or the left side of the air valve (refer to the CLOSED picture).







**WARNING.** Be aware that pressurised air will be discharged from the outlet 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 household 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 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 pressure 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. All accessories are connected to the regulated air outlet (6).
- The pressure of the regulated outlet, as shown on the regulated outlet pressure gauge (7), can be changed by turning the regulating knob (5).



**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 through the accessory being used.

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.

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 release valve under the pressure switch cover (2).

**Note.** When you press the button down you will hear a short air discharge of approx ½ second however, this discharge only occurs if the compressor is actually running at the time, and not in idle.

- Switch off the electrical power supply and remove the electrical plug.
- Pull the ring on the safety valve (8) to ensure all the pressurised air is released from the tank, or open the drain cock to release the pressure from the tank.



#### WARNINGS.

- 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 plug.
- 3. Do not adjust the safety valve.
- 4. Do not use an electrical extension cable.
- 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
- 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 (16).
- 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	Possible remedy		
Motor will not run, running too slow or becoming excessively hot	Power fault or supply voltage too low	Check the power supply		
	Power cord too long or too thin	Use authorised service centre to replace the power cord		
	Faulty pressure switch	Use authorised service centre to repair or replace the switch		
	Faulty motor	Use authorised service centre to repair or replace the motor		
	Main compressor sticking/tight	Use authorised service centre to repair or replace faulty parts		
Main compressor sticking/tight	Moving parts damaged by heat due to insufficient lubrication	Use authorised service centre to check crankshaft, bearings, con rod,		
	Moving parts damaged or blocked by foreign particle	piston rings, etc and replace where necessary		
Vibration or abnormal noise	Loose part	Use authorised service centre to check and repair if necessary		
	Foreign body in main compressor	Use authorised service centre to check and clean if necessary		
	Piston connecting with the valve seat	Use authorised service centre to increase size of gasket		
	Moving parts excessively worn	Use authorised service centre to repair or replace		

Troubleshooting continued				
Trouble	Possible cause	Suggested Remedy		
Insufficient pressure or decreased outlet capacity	Motor running too slow	Use authorised service centre to check and repair if necessary		
	Dirty air filter cartridge	Clean or replace the filter cartridge		
	Leaking safety valve	Use authorised service centre to repair or replace the switch		
	Leaking pipe	Use authorised service centre to check and repair if necessary		
	Damaged gasket	Use authorised service centre to check and repair if necessary		
	Damaged or carbon coated valve seat	Use authorised service centre to check and repair if necessary		
	Damaged piston ring or cylinder	Use authorised service centre to check and repair if necessary		
Excessive oil consumption	Oil level too high	Maintain the oil at the correct level		
	Hole in oil filling plug (14) blocked	Check and clean		
	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
- 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.
- Regularly check the air filter insert cartridge inside the air filter assembly (17) and clean or replace the insert when necessary.
- 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

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

#### Power cord maintenance

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.

## GMC customer assist

If your product needs repairing, replacing, technical service or you simply need help or advice, please contact us on our Customer Assist Line 1300 880 001 (Australia) or 0800 445 721 (New Zealand).

For prompt service we suggest you log your service request online at www.gmcservice.com.au. Should you not have access to the Internet, please contact our service department on 1300 880 001 (Australia) or 0800 445 721 (New Zealand). 7am – 7pm, 7days a week (AEST).

Please note that if repair or replacement is required, you must provide a valid original purchase receipt.

You will need the following details at hand to log your service request;

Personal details: First & Last name, address, pick up address,

contact phone numbers, email address

Product details: Product number, date of purchase, retailer bought from,

State & postcode, receipt number, reason for the request,

copy of official purchase receipt

Attach your purchase receipt and save with this Manual for future reference.

Please refer to our website www.gmcompany.com for full GMC warranty Terms and Conditions.



