

INSTRUCTIONS FOR:

COMPRESSORS 24LTR/1.5HP & 50LTR/2.0HP DIRECT DRIVE

MODEL No's: **SA2415 & SA5020**

Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.

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IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.







1. SAFETY INSTRUCTIONS

1.1 ELECTRICAL SAFETY.

WARNING! It is the user's responsibility to read, understand and comply with the following:

You must check all electrical equipment and appliances to ensure they are safe before using. You must inspect power supply leads, plugs and all electrical connections for wear or damage. You must ensure the risk of electric shock is minimised by the installation of appropriate safety devices. An RCCB (Residual Current Circuit Breaker) should be incorporated in the main distribution board. We also recommend that an RCD (Residual Current Device) is used with all electrical products. It is particularly important to use an RCD with portable products that are plugged into an electrical supply not protected by an RCCB. If in doubt consult a professional electrician. You may obtain a Residual Current Device by contacting your Sealey dealer. **You must** also read and understand the following instructions concerning electrical safety.

- 1.1.1 The *Electricity At Work Act 1989* requires all portable electrical appliances, if used on business premises, to be tested by a qualified electrician, at least once a year, using a Portable Appliance Tester (PAT).
- 1.1.2 The *Health & Safety at Work Act 1974* makes owners of electrical appliances responsible for the safe condition of those appliances, and the safety of appliance operators. *If in any doubt about electrical safety, contact a qualified electrician.*
- 1.1.3 Ensure the insulation on all cables and the product itself is safe before connecting to the mains power supply. See 1.1.1. & 1.1.2. above and use a Portable Appliance Tester (PAT).
- 1.1.4 Ensure that cables are always protected against short circuit and overload.
- 1.1.5 Regularly inspect power supply leads and plugs for wear or damage and connections to ensure that none are loose.
- 1.1.6 **IMPORTANT!** Ensure that the voltage marked on the appliance matches the power supply to be used and that the plug is fitted with the correct fuse see fuse rating at right.
- 1.1.7 **DO NOT** pull or carry the powered appliance by its power supply lead.
- 1.1.8 **DO NOT** pull power plugs from sockets by the power cable.
- 1.1.9 DO NOT use worn or damaged cables, plugs or connectors. Immediately have any faulty item repaired or replaced by a qualified electrician. When an ASTA/BS approved UK 3 pin plug is damaged, cut the cable just above the plug and dispose of the plug safely. Fit a new plug according to the following instructions (UK only).
 - a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.
 - b) Connect the BROWN live wire to the live terminal 'L'.
 - c) Connect the BLUE neutral wire to the neutral terminal 'N'.

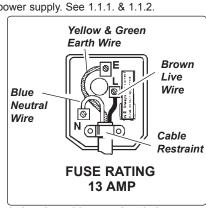
After wiring, check there are no bare wires, that all wires have been correctly connected, that the cable outer insulation extends past the cable restraint and that the cable restraint is tight.

Double insulated products are often fitted with live (BROWN) and neutral (BLUE) wires only. Double insulated products are always marked with this symbol . To re-wire, connect the brown & blue wires as indicated above. DO NOT connect the brown or blue wires to the earth terminal

IMPORTANT! The use of extension leads to connect these compressors to the mains is not recommended as the resulting voltage drop reduces motor, and therefore pump performance.

1.2 GENERAL SAFETY INSTRUCTIONS

- ✓ Familiarise yourself with the application and limitations of the compressor.
- Ensure the compressor is in good order and condition before use. If in any doubt do not use the unit and contact an electrician/service agent.
- WARNING! Compressor must only be serviced by an authorised agent. DO NOT tamper with, or attempt to adjust, pressure switch or safety valve.
- Before moving, or maintaining the compressor ensure it is unplugged from the mains supply and that the air tank pressure has been vented.



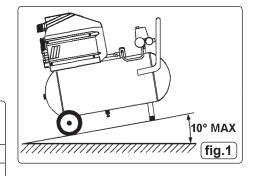
- ✓ Maintain the compressor in good condition and replace any damaged or worn parts. Use genuine parts only. *Unauthorised parts may be dangerous and will invalidate your warranty.*
- Read the instructions relating to any accessory to be used with this compressor. Ensure the safe working pressure of any air appliance used exceeds compressors output pressure. If using spray a gun, check that the area selected for spraying is provided with a air change system/ventilation.
- ✓ Ensure the air supply valve is turned off before disconnecting the air supply hose.
- ✓ To move the compressor use the handle only. Lift the compressor so that the front leg gives enough clearance for manoeuvring but maintain unit's centre of gravity in front of the wheels. **DO NOT** attempt to lift or move the compressor by any other means.
- ✓ Use the compressor in a well ventilated area and ensure it is placed on a firm surface.
- ✓ Keep tools and other items away from the compressor when it is in use, and keep area clean and clear of unnecessary items.
- Ensure the air hose is not tangled, twisted or pinched.
- ✓ Keep children and unauthorised persons away from the working area.
- X DO NOT dis-assemble compressor for any reason. The unit must be checked by qualified personnel only.
- **DO NOT** use the compressor outdoors, or in damp, or wet, locations.
- X DO NOT operate within the vicinity of flammable liquids, gases or solids.
- X DO NOT touch compressor cylinder, cylinder head or pipe from head to tank as these may be hot.
- X DO NOT attempt to move the compressor by pulling the air hose. Only move the compressor by the handle.
- **DO NOT** use this product to perform a task for which it has not been designed.
- **DO NOT** deface the certification plate attached to the end of the compressor tank.
- X DO NOT cover the compressor or restrict air flow around the unit whilst operating.
- DANGER! DO NOT direct the output jet of air towards people or animals.
- **DO NOT** operate the compressor without an air filter.
- X DO NOT allow anyone to operate the compressor unless they have received full instructions.
- □ WARNING! The air tank is a pressure vessel and the following safety measures apply:
- X DO NOT tamper with the safety valve, DO NOT modify or alter the tank in any way and DO NOT strap anything to the tank.
- X DO NOT subject the tank to impact, vibration or to heat and DO NOT allow contact with abrasives or corrosives.
- ✓ Drain condensation from tank daily and inspect inside walls for corrosion every three months and have a detailed tank inspection carried out annually. The tank shell must not fall below the certified thickness at any point.
- WARNING! If an electrical fuse blows, ensure it is replaced with an identical fuse type and rating.
- ✓ When not in use, store the compressor carefully in a safe, dry, childproof location.

2. INTRODUCTION & SPECIFICATIONS

Aluminium cylinder head with cast iron cylinder gives added resistance to wear. Suitable for general-purpose workshop applications. Pump head directly coupled to heavy-duty induction motor for reliable and quiet operation. Welded tank complies with latest European standards. Fitted with fully automatic pressure cut-out switch with twin gauges displaying tank and working pressures. Fitted with ASTA/BS approved non-rewirable plug.

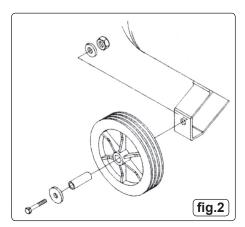


Model	Motor Output (hp)	Voltage/ Phase	Current (A)	Compressor Displacement (cfm)	Tank Capacity (I)	Max. Pressure (psi/bar)	Noise Level (dB.A)
SA2415	1.5	230/1	5	6	24	116/8	75
SA5020	2.0	230/1	7	7	50	116/8	75



3. PREPARATION

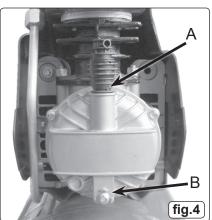
- **3.1** Remove compressor from packaging and inspect for any shortages or damage. If anything is found to be missing or damaged contact your supplier.
- 3.2 Save the packing material for future transportation of the compressor. We recommend that you store the packing in a safe location, at least for the period of the guarantee. Then, if necessary, it will be easier to send the compressor to the service centre.
- 3.3 Attach wheels to the compressor as shown in fig.2.
- 3.4 Confirm that the mains voltage corresponds with the voltage shown on the compressor data plate.
- 3.5 The compressor should be operated on a flat surface, or one that does not exceed 10° either transversely or longitudinally (fig.1) and should be in a position that allows good air circulation around the unit.
- 3.6 Remove the plastic transit plug from the oil filler hole and replace it with the dipstick/ breather as shown in fig.4. It is a push fit, ensure that it is pushed fully home.
- 3.7 Before using the compressor check the oil level using the dipstick. If the oil is not up to the mark as shown in fig.3 it should be topped up with Sealey CPO Compressor oil.



4. OPERATION

- WARNING! Ensure that you have read, understood and apply Section 1 safety instructions.
- IMPORTANT! The use of extension leads to connect these compressors to the mains is not recommended as the resulting voltage drop reduces motor, and therefore pump performance.
- NOTE: Take care when selecting tools for use with the compressor. Air tool manufacturers normally express the volume of air required to operate a tool in cubic feet per minute (cfm). This refers to free air delivered by the compressor ('air out') which varies according to the pressure setting. Do not confuse this with the compressor displacement which is the air taken in by the compressor ('air in'). 'Air out' is always less than 'air in' due to losses within the compressor.





4.1 STARTING THE COMPRESSOR

PULL ON/PUSH OFF. The switch is a push/pull type as shown in fig.5.1. To turn the compressor 'ON' pull the switch knob upwards. To turn the compressor 'OFF' push the knob downwards.

- **4.2** Check that the ON/OFF switch is in the "OFF" position, the regulator tap (fig.5.3) is closed, the output gauge (fig.5.4) must read Zero '0' bar.
- **4.3** Plug mains lead into mains supply and start the compressor by moving the main switch to the 'ON' position.
- 4.4 When starting the compressor for the first time, leave it running with no air tools connected to the air outlet (fig.5.3). Make sure that pressure in the tank rises and that the compressor stops automatically when the maximum pressure value allowed written on the plate and shown on the gauge (fig.5.5) is achieved. The compressor will now operate automatically. The pressure switch stops the motor when the maximum tank pressure is reached and restarts it when the pressure falls below the minimum threshold approx. 2 bar (29psi) less than the maximum pressure.
- 4.5 Stop the compressor by moving the main switch to the 'OFF 'position. The compressed air inside the compressor head will flow out, making the restart easier and preventing the motor from being damaged. DO NOT, other than in an emergency, stop the compressor by switching off the mains socket, or by pulling the plug out, as the pressure relief will not then operate and motor damage may result upon restart.

When the compressor runs correctly and is stopped correctly there will be: (a) a whistle of compressed air when the motor stops,

- (b) a protracted whistle (about 20-25 seconds) when the compressor starts with no pressure in the tank.
- 4.6 The output pressure is regulated by the pressure regulator (fig.5.2). Lift and turn the knob clockwise to increase pressure and anticlockwise to reduce it push knob down to lock in required position. To determine the correct working pressure for any piece of equipment check the corresponding manual. When the compressor is not being used set the regulated pressure to zero so as to avoid damaging the pressure regulator.
- **NOTE:** a) If the motor does not cut in and out, but runs continuously when using an air appliance, the capacity of the compressor may be too small for the equipment or tool.
 - b) The gauge (fig.5.5) indicates the pressure inside the main tank, NOT the pressure supplied to the air equipment. Should the pressure in the main tank exceed the pre-set switch maximum, a safety valve will activate.

WARNING! For this reason DO NOT tamper with, or adjust, the switch or safety valve.

5. MAINTENANCE

In order to keep the compressor in good working condition, periodic maintenance is essential

IMPORTANT! Failure to carry out maintenance tasks may invalidate the warranty on your compressor.

- WARNING! Before performing any maintenance operation, switch off the compressor, disconnect from electricity supply and release all air from the tank.
- 5.1 Operations to be carried out after the first 50 working hours:
 - Check that all bolts/nuts are tight, particularly those retaining the crankcase and cylinder head.
 - Replace the lubricating oil see para 5.4.

5.2 Operations to be carried out weekly:

- Drain condensation by opening the valve located under the tank (fig.7).
 Place a container under the valve and open the valve by turning anticlockwise.
- b) Check oil level and, if necessary, top up.
- WARNING! Take care if there is still pressure inside the cylinder as water could flow out with coinsiderable force.

Recommended pressure 1 - 2bar max.

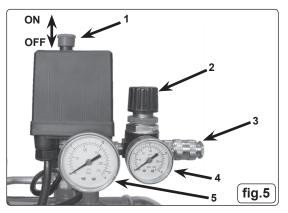
5.3 Operations to be carried out every 50 hours

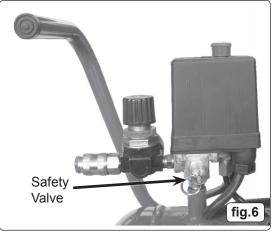
(or more frequently, if the compressor operates in a very dusty atmosphere):

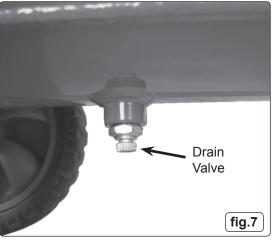
- a) Unscrew the air filter housing and remove the filter element (fig.8) and wash in soapy water, rinse and dry. Do not operate the compressor without the filter as foreign bodies or dust could seriously damage the pump.
- b) Check for oil leaks.

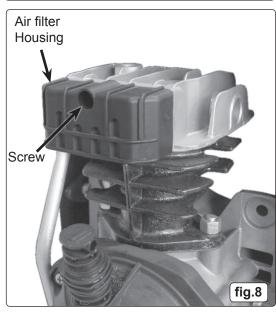
5.4 Operations to be carried out every 100 hours:

- a) Replace the lubricating oil. For oil specifications see 5.7.
 Remove the dipstick/breather plug (see fig.4.A) then unscrew oil drain plug 'B', draining the oil into a container.
 Drain when the compressor is hot so that oil drains rapidly and completely. Incline compressor to ensure complete drainage.
 Replace oil drain plug and refill through the dipstick/breather aperture.
 Do not overfill. Replace dipstick.
- Check the automatic cut-out at max. pressure and the automatic cut-in at 2bar below.









- □ WARNING! Never mix different oils and do not use non-detergent/low quality oils as the compressor may be damaged.
- □ WARNING! Dispose of waste oil only in accordance with local authority requirements.
- **5.5** Operations to be carried out every 400 hours:
 - a) Replace air filter. (See fig.8)
 - b) Check all tube fittings and electrical connections.
 - c) Inspect pressure tank inside and out for damage or corrosion.

5.6 Maintenance Schedule

Maintenance Operations	Weekly	50hrs	100hrs	3 Months
Drain condensation	•			
Check oil level	•			
Clean intake filter		•		
Check for oil leaks		•		
Replace oil			•	
Check cut-out			•	
General cleaning of compressor			•	
Replace air filter				•
Check tube fittings and electrical connections				•
Internal & external inspection of tank				•

5.7 Recommended oils

Recommended oil for compressors, suitable for room temperatures ranging from 5°C to 25°C: SEALEY CPO compressor oil. Room temperature below 5°C: SAE 20 compressor oil. Approximate oil capacity: 0.16 litres.

6. TROUBLE SHOOTING

Fault	Cause	Remedy		
Pressure drop in the tank.	Air leaks at connections.	Run compressor to max. pressure, switch off. Brush soap solution over connections and look for bubbles. Tighten connections showing leaks. If problem persists contact Authorised Service Agent.		
Pressure switch valve leaks when compressor is idle.	Non-return valve seal defective.	Replace pressure switch.		
Compressor stops and does not restart.	Power failure. Motor failure.	Check electricity supply and fuse. Contact Authorised Service Agent.		
Compressor does not stop at max pressure.	Pressure switch fault.	Contact Authorised Service Agent.		
Compressor does not reach max pressure.	Filter clogged. Head gasket or valve fault.	Replace filter element. Contact Authorised Service Agent.		
Compressor noisy with metallic knock.	Low oil level. Bearing or piston damage.	Turn off and top up oil immediately. Contact Authorised Service Agent.		

Declaration of Conformity We, the sole UK importer, declare that the products listed below are in conformity with the following standards and directives.

DIRECT DRIVE COMPRESSORS Models: SA2415 & SA5020

87/404/EEC Pressure Vessel Directive 2004/108/EC EMC Directive 2006/95/EC Low Voltage Directive 2006/42/EC Machinery Directive



The construction files for these products are held by the Manufacturer and may be inspected, by a national authority, upon request to Jack Sealey Ltd.

Signed by Mark Sweetman



12th May 2009

For Jack Sealey Ltd. Sole UK importer of Sealey Power Products.

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. **IMPORTANT:** No liability is accepted for incorrect use of this equipment.

WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.

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INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.



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