



INSTRUCTIONS FOR:  
**2.0HP OIL FREE DIRECT DRIVE COMPRESSOR**  
Model: **SA22420**

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.



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

## 1. SAFETY INSTRUCTIONS

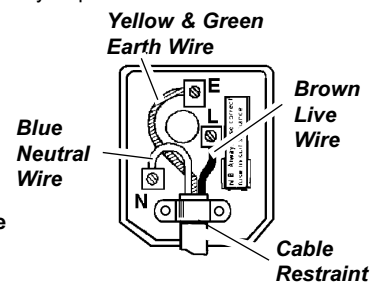
### 1.1. ELECTRICAL SAFETY. **WARNING! It is the user's responsibility to read, understand and comply with the following:**

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 qualified 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, using a Portable Appliance Tester (PAT), at least once a year.
- 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 is loose.
- 1.1.6. **Important:** Ensure the voltage marked on the product is the same as the power supply to be used, and check that the plug is fitted with the correct capacity fuse.
- 1.1.7. **DO NOT** pull or carry the appliance by its power supply lead.
- 1.1.8. **DO NOT** pull plug from socket by the power cable.
- 1.1.9. **DO NOT** use worn or damaged leads, plugs or connections. Immediately replace or have repaired by a qualified electrician.
- 1.1.10. This device is fitted with a ASTA/BS approved non-rewirable plug.

If the plug is damaged it should be replaced according to the instructions below.  
(UK only - see diagram at right). Ensure the unit is correctly earthed via a three-pin plug.

- 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'.**
- d) **Ensure the plug is fitted with a 13 amp fuse.**
- e) **After wiring, check that 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 restraint is tight.**



### 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 that it is unplugged from the mains supply and that the tank pressure has been vented.
- ✓ Only use recommended attachments and parts. To use unauthorised items may be dangerous and will invalidate your warranty.
- ✓ Read the instructions regarding any accessory used with the compressor. Ensure the safe working pressure of any air appliance used exceeds the compressor output pressure. If using a spray gun, check that the area selected for spraying is provided with air change system/ventilation.
- ✓ Ensure the air supply valve is turned off before disconnecting the air supply hose.
- ✓ 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 work area.
- x **DO NOT** dis-assemble compressor for any reason. The unit must be serviced by qualified personnel only.
- x **DO NOT** use the compressor outdoors, or in damp, or wet, locations and **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 and will remain so for some time after shutdown.
- x **DO NOT** attempt to move the compressor by pulling the air tool hose.
- x **DO NOT** use the compressor for a task for which it is not designed.
- x **DO NOT** cover the compressor or restrict air flow around the machine whilst operating.
- ▲ **DANGER! DO NOT direct the air hose towards people or animals.**
- x **DO NOT** operate the compressor without inlet 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:**  
**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. DO NOT subject the tank to impact, vibration or to heat and DO NOT allow contact with abrasives or corrosives. DO drain condensation from tank daily, 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 in a safe, dry, childproof location.

## 2. INTRODUCTION & SPECIFICATION

Ideal for use where an oil-free air delivery is required and especially suited to small, low pressure, touch-up and airbrush spraying as well as general-purpose applications, including air stapler/nailers. Simple construction with fewer components makes this unit practically maintenance-free. Reduced weight gives greater portability. Compressor can be transported and even operated on its side. SA22420 has a tubular frame which also provides the air storage. This design gives a low centre of gravity, for improved stability, and protection for the compressor unit – both important features for site use. Supplied with fully automatic pressure cut-out switch, air regulator plus tank and supply pressure gauges. Fitted with ASTA/BS approved non-rewirable plug.

### 2.1. Specification

Model	Max Motor Output (hp)	Voltage/ Phase	Current (A)	Air Displacement (cfm)	Free Air Delivery (cfm)	Tank Capacity (ltr)	Max. Pressure (psi/bar)	Noise Level (dB.A)
SA22420	2	230/1	6.5	6.0	5.2	4	116/8	92

## 3. PREPARATION

- 3.1. Remove compressor from packaging and inspect. 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. Confirm that the voltage shown on compressor data plate corresponds with the supply voltage.
- 3.4. The compressor should be in a position that allows good air circulation around the unit.



## 4. OPERATION

- ❑ **WARNING!** If an extension lead must be used it should be no longer than 10mtrs and have a 2.5mm<sup>2</sup> cross section. Using an excessively long or thin-wired extension cable will cause severe damage to the motor. **Always** fully unwind extension cables. If using extension cables outdoors, always use a cable marked for outdoor use. 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. 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 - and so it is important that, before choosing equipment, you study the 'Free Air Delivery' figures shown in the Specification chart, Section 2.
  - ❑ **WARNING!** Ensure that you read, understand and apply Section 1 safety instructions.
- 4.1. Make sure the main switch (fig.1) is in the "Off" position.
  - 4.2. Plug the lead into mains supply and start the compressor by pulling the main switch to "On" (fig.1).
  - 4.3. When starting the compressor for the first time, leave it running with air outlet closed. Make sure that the 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) 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 pressure falls below the minimum threshold - approx. 2 bar (29psi) less than the maximum pressure.
  - 4.4. To stop the compressor, press the main switch to 'off' (fig.1). 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 occur and motor damage may result upon restart.
- Note: 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. It is recommended that the motor is run continuously for no more than 15 minutes at a time and allowed 15 minutes to cool down before using again.
- 4.5. It is possible to adjust the the outlet pressure by turning the regulator knob (Fig.2 clockwise or anticlockwise to respectively increase or reduce the outlet pressure to the desired level. When the desired outlet pressure is achieved use the locking ring (fig.2) to lock the pressure regulator to your desired setting.

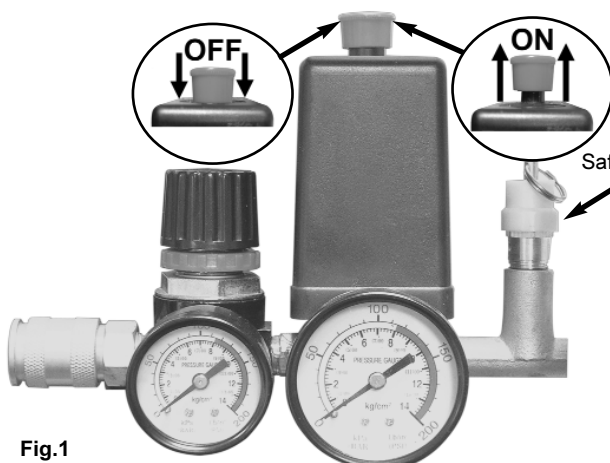


Fig.1

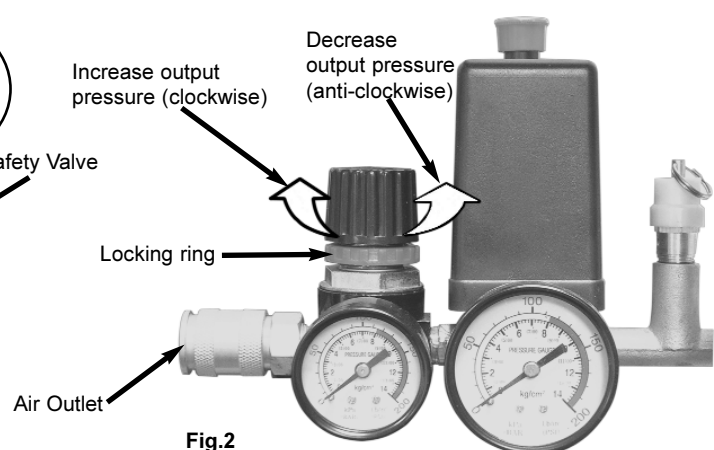


Fig.2

## 5. MAINTENANCE

- ❑ **WARNING! Before performing any maintenance operation, switch off compressor, disconnect from power supply and vent air from tank.**

This compressor is oil free and therefore requires no oil in order to operate, this does not however negate the requirement for your air tools to be lubricated. For details of oiling requirements for your air tools, consult the instruction manual for the individual tool.

5.1 Drain the air tank weekly.

Note: Water in the tank can damage your air tools and produce a poor finish when spraying, it also damages the inside of the receiver tank.

5.1.1 Before draining the water, you must first make sure the air has been discharged from the receiver tank.

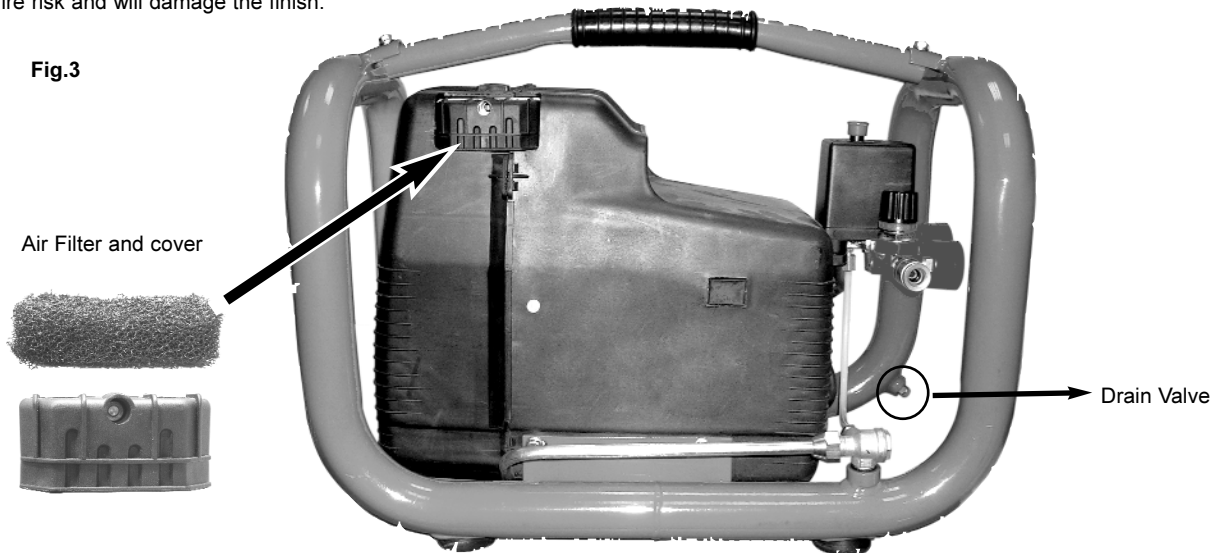
5.1.2 To drain the tank simply unscrew the drain valve on the bottom of the receiver tank (fig.3), any water present should then flow out. As there is no lubrication used the water will not be contaminated and can be disposed of in the sewer system.

5.2 As the compressor is designed for intermittent use the necessity for cleaning the filter will be reduced. To check the filter and clean it, remove the screw holding the filter cover and withdraw the filter cover and filter (fig.3). To clean, blow through with an airline.

- ❑ **WARNING! Do not operate the compressor without the filter as this will cause severe damage to the unit.**

5.3 To clean the compressor use a damp cloth and mild detergent. Do not use petrol or other flammable liquids as they present a fire risk and will damage the finish.

Fig.3



## 6. TROUBLESHOOTING

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.	Empty the air tank, remove the non-return valve cap and clean and, if necessary, replace the seal.
Compressor stops and does not restart.	Motor failure.	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.	Bearing or piston damage.	Contact Authorised Service Agent.

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

**OIL FREE DIRECT DRIVE COMPRESSOR**

**Model: SA22420**

87/404/EEC Pressure Vessel Directive  
89/336/EEC EMC Directive  
73/23/EEC LV Directive  
98/37/EC Machinery Directive  
93/68/EEC Marking Directive



The construction file for this product is held by the Manufacturer and may be inspected, by a national authority, upon request to Jack Sealey Ltd.

Signed by Mark Sweetman

1st February 2005

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.

**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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