

# SEALEY

# POWER PRODUCTS

INSTRUCTIONS FOR:  
**2.3HP OIL FREE  
BI-CYLINDRICAL COMPRESSOR**  
MODEL: **SA3304**

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.

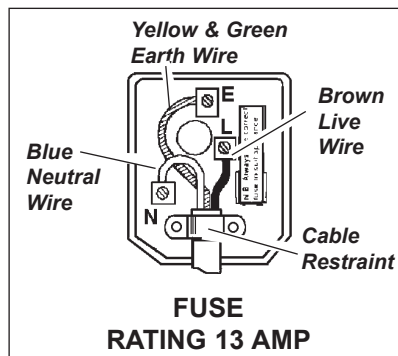
**WARNING! It is the user's responsibility to read, understand and comply with the following:**

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 are 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 damage 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. Use of 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 outdoors in damp, or wet, locations and **DO NOT** operate within the vicinity of flammable liquids, gases or solids.
- x **DO NOT** touch the 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 filters.
- 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.
  - 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.

### 1.3 LIFTING AND MOVING

The SA3304 is fitted with an adjustable handle for ease to assist in the transportation of the compressor. The handle can be set either in a forward position (fig.1) or set in the rearward position as shown in fig.2.

1.3.1. To adjust the handle, slacken off both of the adjustable handle knobs, raise the handle to the desired height and retighten the knobs, ensuring that the handle is secure before attempting to move the compressor.

1.3.2. When lifting the compressor, the handle must be in the forward position and locked in the lowest setting as shown in fig.1.

❑ **WARNING!** Always get help to lift the compressor and take care to follow manual handling procedures for the correct method of lifting heavy objects.

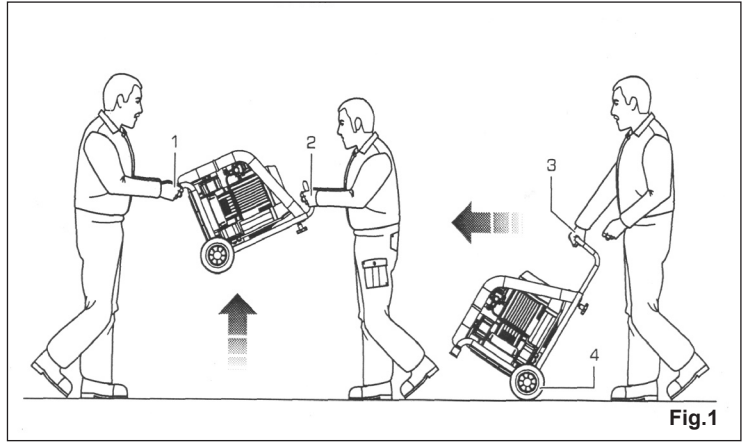


Fig.1

## 2. INTRODUCTION & SPECIFICATION

Bi-cylindrical pump offers superb performance and reliability. Ideal for use where an oil-free air delivery is required. Simple construction with fewer components makes this unit practically maintenance-free. Reduced weight gives greater portability. Frame design giving a low centre of gravity, for improved stability, and protection of the compressor unit - both important features for site use. Pumps up to full pressure in under 10seconds. Supplied with fully automatic pressure cut-out switch, air regulator plus tank and supply pressure gauges. Fitted with ASTA/BS approved non-rewirable plug.

SPECIFICATION	
Model No:	SA3304
Motor Output:	2.3hp
Voltage/Phase:	230V ~ 1ph
Input Current:	7.4A
Air Displacement:	11.6cfm
Maximum Free Air Delivery:	9.5cfm
Tank Capacity:	3ltr
Maximum Pressure:	145psi/10bar
Noise Pressure:	95dB
Weight:	32kg
Dimensions:	396x473x598mm

## 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.



Fig.2

## CONTENTS

1. Check Valve
2. Air Filters
3. Wheels
4. Safety Valve
5. Drain Valve
6. Tank Pressure Gauge
7. Output Pressure Gauge
8. Pressure Switch
9. Air Tank
10. ON (I) ~ OFF (O) Switch
11. Electric Motor
12. Thermal Reset Switch
13. Output Pressure Regulator
14. Outlet Tap
15. Compressor to Tank Connection Pipe
16. Rubber Feet
17. Cooling Fan Guard
18. Bi-Cylindrical Compressor Unit
19. Adjustable Handle Knob
20. Adjustable Handle

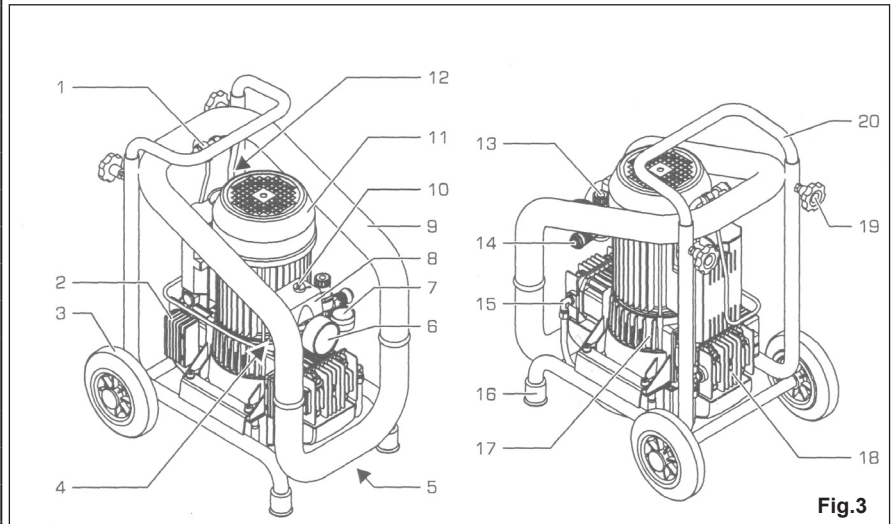


Fig.3

## 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.4.3) is in the "OFF" (0) position.
  - 4.2. Plug the lead into mains supply and start the compressor by turning the main switch to "ON" (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 145psi (10 bar) tank pressure (fig.4.7) is reached and restarts it when pressure falls below 102psi (7 bar).
  - 4.4. To stop the compressor, press the main switch to "OFF" (fig.4.3). 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.
  - 4.5. It is possible to adjust the outlet pressure by lifting and turning the regulator knob (Fig.4.4) clockwise or anti-clockwise to respectively increase or decrease the outlet pressure to the desired level. When the desired outlet pressure is shown on the outlet gauge (fig.4.6) is achieved press down the knob to lock the pressure regulator at the desired setting.
  - 4.6. Should a current overload or short circuit occur the Thermal Circuit Breaker switch will be tripped.
    - 4.6.1. Switch the compressor to the "OFF" (0) position, (fig.4.3).
    - 4.6.2. Reset the Thermal Circuit Breaker as shown in fig.5.1.
- NOTE:** This may require leaving the compressor to cool down for a period of time before restarting.

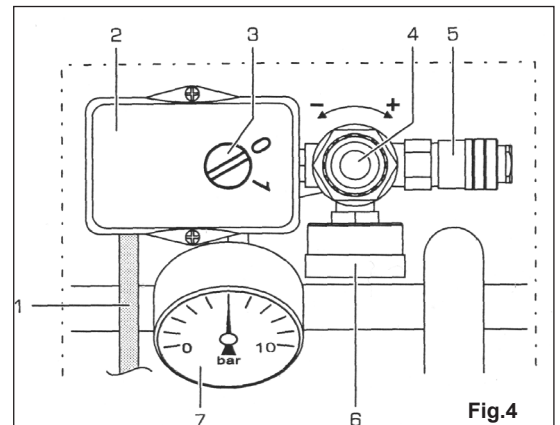


Fig.4

1. Mains Supply Cable
2. Pressure Switch
3. ON/OFF Switch
4. Air Output Regulator
5. Air Outlet Quick Release Connection
6. Output Pressure Gauge
7. Tank Pressure Gauge

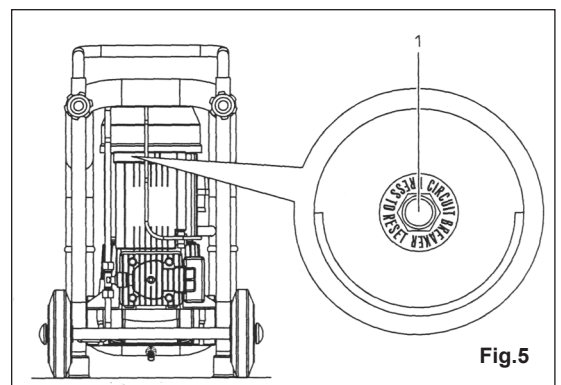


Fig.5

## 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.

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.6), 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. To check and clean the filters, remove the screw (fig.6.1) holding each of the filter housings, remove the housings (fig.6.2) from the compressor, unclip the filter cover (fig.6.4) and remove the two filters (fig.6.3) from each housing. To clean, blow through with an airline.  
Refit filters before starting the compressor.

- ❑ **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.

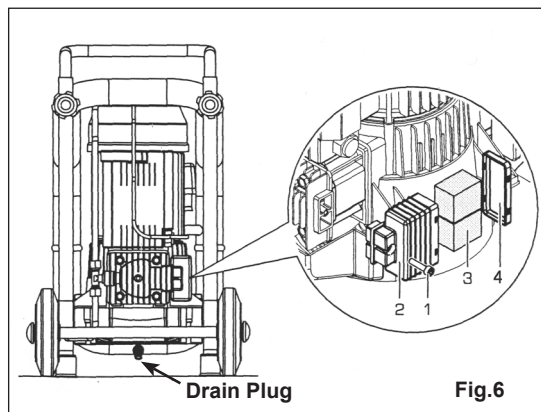


Fig.6

## 6. TROUBLESHOOTING

Problem	Cause	Remedy
The machine does not switch on or stops and will not restart	No Power	1. Check the ON/OFF Switch is in the ON (1) position 2. Check power supply
	Thermal switch has tripped	1. Switch off the machine 2. Press the reset button 3. Allow to cool and then switch the machine on
The machine keeps starting up, when tools are not in use	Leaks from the air line, connections or air tool	1. Check the tool is not damaged 2. Check the air line and connections for leaks
No air supply to the tool	The tank is not under pressure	Switch on the machine and check pressure on main pressure gauge
	Output pressure incorrectly adjusted	Ensure output pressure is greater than 0 bar
	Damaged tool	Check the integrity of the tool
Pressure decrease in air tank	Leaks from the air line, connections or air tool	1. Check the tool is not damaged
		2. Check the air line and connections for leaks
		3. Ensure the condensation drain valve is fully closed
Safety valve keeps tripping out	Faulty pressure switch	Contact Sealey dealer
Air leak from pressure switch with machine OFF	Dirty or worn pressure switch	Contact Sealey dealer
Machine vibrates and is noisy	Internal mechanical break	Contact Sealey dealer
Reduced air supply, motor keeps running	Dirty air filters	Clean/replace air filters

**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 BI-CYLINDRICAL COMPRESSOR

**Model: SA3304**

87/404/EEC Pressure Vessel Directive  
2004/108/EC EMC Directive  
2006/95/EC Low Voltage Directive  
2006/42/EC Machinery Directive  
93/68/EC CE 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

30th July 2008

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.



**POWER PRODUCTS**

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