



# OIL FREE DIRECT DRIVE AIR COMPRESSORS

MODEL NO: **SAC600S, SAC2400S, SAC500S**

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 & 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. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instructions



Wear ear protection



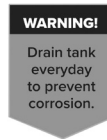
**DO NOT** open the air cock before an air hose is attached



**WARNING:** Hot surface



**WARNING:** Automatic start up



**WARNING!**

Drain tank everyday to prevent corrosion.

## 1. SAFETY

### 1.1. ELECTRICAL SAFETY

**WARNING!** It is the responsibility of the owner and the operator to read, understand and comply with the following: You must check all electrical products before use to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices. A Residual Current Circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a Residual Current Device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician. You must also read and understand the following instructions concerning electrical safety:

**1.1.1. The Health & Safety at Work Act 1974** makes owners of electrical appliances responsible for the safe condition of those appliances and the safety of the appliance operators. **If in any doubt about electrical safety, contact a qualified electrician.**

1.1.2. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.

1.1.3. Ensure that cables are always protected against short circuit and overload.

1.1.4. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that none are loose.

**1.1.5. 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.

**DANGER!** If the power cable for this equipment is damaged, it must be replaced by the manufacturer or its after-sales service or similarly trained personnel to avoid danger.

✗ **DO NOT** pull or carry the appliance by the power cable.

✗ **DO NOT** pull the plug from the socket by the cable.

✗ **DO NOT** use worn or damaged cables, plugs or connectors. Immediately have any faulty item repaired or replaced by a qualified electrician.

**1.1.6. Over/current Protection:** The user has to make provision for the installation of the over-current protection of the power circuit.

**1.1.7. Electrical disconnecting device:** The user has to make provisions for the installation of the electrical disconnecting device of the power circuit. The supply disconnection device is to be in accordance with EN 60204-1:2006.

**NOTE:** If using a transformer to supply the compressor, it must be rated at a minimum of 2kVA to allow the compressor to run efficiently.

### 1.2. GENERAL SAFETY

✓ Before you connect the equipment to the mains supply make sure that the data on the rating plate are identical to the mains data .

✓ Familiarise yourself with the application and limitations of the compressor.

✓ Operation must be with all guards, covers, lids and enclosures correctly in place.

✓ This compressor has not been designed for commercial, trade or industrial applications. The warranty will be voided if the machine is used in commercial, trade or industrial businesses or for equivalent purposes.

✓ Fully assemble the compressor before using for the first time.

✓ The concentration of processed gases that can displace breathing air shall be kept within acceptable levels. Reference EN 12021 for acceptable levels of contaminants in breathing air.

✓ The equipment is to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse. The user/operator and not the manufacturer will be liable for any damage or injuries of any kind caused as a result of this.

✓ Remove from mains supply when performing maintenance or inspections.

✓ 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.

✓ Delivery hoses should be fitted with a safety cord. It is essential to use separators, water traps and drains which process the liquids produced by the compressor system is put into operation.

✓ The compressor may only be used in suitable rooms (with good ventilation and an ambient temperature from +5°C to +40°C). Ensure there is no dust, acids, vapours, explosive gases, or inflammable gases in the room. The air intake should be from a clean, outside air source.

**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.

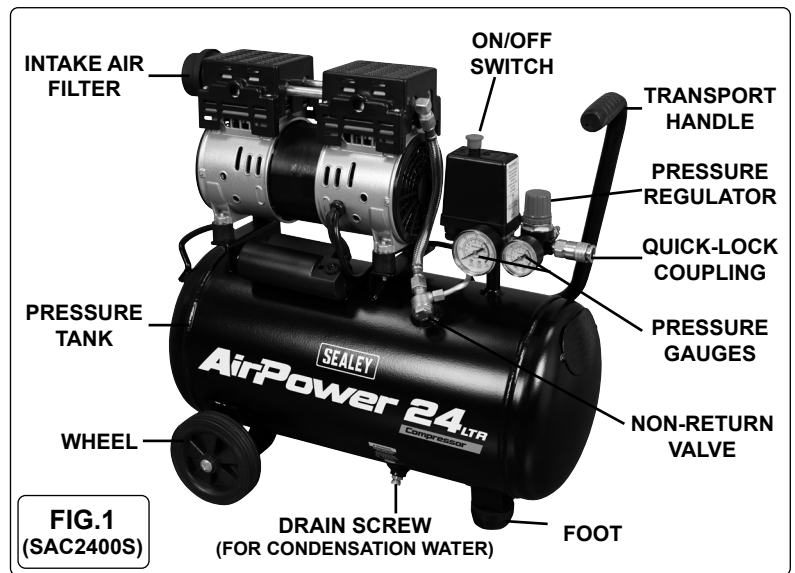
✓ If using a spray gun, check that the area selected for spraying is provided with an air change/ventilation system.

✓ Ensure the air supply valve is turned off before disconnecting the air supply hose.

✓ To move the compressor use the handle only. Maintain unit's centre of gravity when lifting.

✗ **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.
- ✗ **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.
- ✗ **DO NOT** operate within the vicinity of flammable liquids, gases or solids.
- ✗ **DO NOT** touch compressor cylinder, cylinder head or pipe from head to tank as these may be hot.
- ✗ **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 compressor tank.
- ✗ **DO NOT** cover the compressor or restrict air flow around the unit whilst operating.



**FIG.1**  
(SAC2400S)

- ▲ **DANGER! DO NOT** direct the output jet of air towards people or animals.
- ✗ **DO NOT** operate the compressor without an air filter.
- ✗ **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** weld tank.
  - ✗ **DO NOT** subject the tank to impact, vibration or to heat and **DO NOT** allow contact with abrasives or corrosives.
  - ✗ When there is pressure in the receiver tank, **DO NOT** loosen any part of the machine.
- ✓ Drain condensation from tank daily.
- **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.
- ✓ All hoses and fittings shall be suitable for the site use at the maximum allowable pressure of the portable compressor.
- ✓ When the compressor is not in use, it should be switched off, disconnected from the mains supply and the air drained from the tank.
- ✓ Under the PRESSURE SYSTEMS SAFETY REGULATION 2000 it is the responsibility of the owner of the compressor to initiate a system of inspection that both defines the frequency of the inspection and appoints a person who has specific responsibility for carrying out the inspection.

## 2. INTRODUCTION

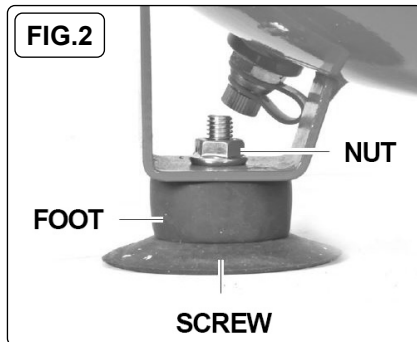
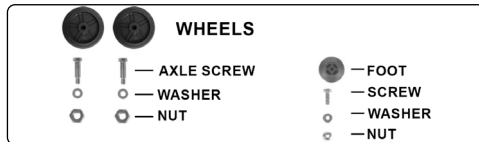
All models feature aluminium cylinder heads with cast iron cylinders giving added resistance to wear. Fitted with fully automatic pressure cut-out switches and twin gauges displaying tank and working pressures. Pump heads directly coupled to heavy-duty induction motors for reliable and quiet operation. Precision welded receiver tanks manufactured to meet Pressure Vessel Directive. Suitable for general-purpose and workshop applications. The benefits of oil free compressors include: Easy maintenance, reduced noise levels, better efficiency, quieter when running and no oil contamination in the air supply.

## 3. SPECIFICATION

MODEL NO.	SAC6000S	SAC2400S	SAC5000S
Air Displacement cfm(L/min):	4.7(133)	5.6(160)	5.6(160)
Fuse Rating:	13A	13A	13A
Maximum Free Air Delivery cfm(L/min):	1.4(40)	2.61(74)	2.61(74)
Maximum Pressure:	116psi(8bar)	116psi(8bar)	116psi(8bar)
Minimum Rated Supply:	13A	13A	13A
Motor Output:	1hp	1hp	1hp
Noise Level:	77db(A)	79db(A)	73dB(A)
Noise Test Code:	EN ISO 2151:2008	EN ISO 2151:2008	EN ISO 2151:2008
Outlet:	Quick Release Coupling	Quick Release Coupling	Quick Release Coupling
Phase:	1ph	1ph	1ph
Plug Type:	3-Pin BS	3-Pin BS	3-Pin BS
Power Supply Cable Length:	1.8m	1.8m	1.8m
Receiver Capacity:	6L	24L	50L
Size (W x D x H):	450mm x 160mm x 470mm	530mm x 290mm x 560mm	690mm x 360mm x 600mm
Supply:	230V/13A	230V/13A	230V/13A
Inlet Discharge Pressure & Temperature:	0.8MPA/70°C	0.8MPA/70°C	0.8MPA/70°C
Maximum Pressure Ratio:	0.8MPA	0.8MPA	0.8MPA
Maximum Speed of the Unit:	1440RPM	1440RPM	1440RPM
Weight	15.1kg	22.2kg	28kg

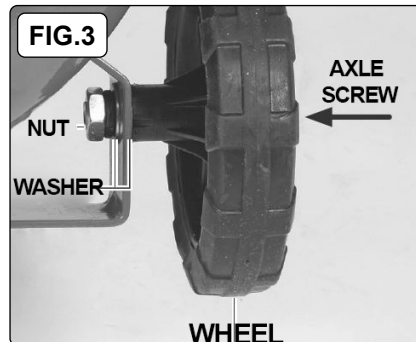
## 4. ASSEMBLY

**IMPORTANT:** You must fully assemble the appliance before using it for the first time. See fixings below:



### FITTING THE SUPPORT FOOT

Fit the supplied support foot as shown in fig.2.



### FITTING THE WHEELS

Fit the wheels as shown in fig.3



### FITTING THE AIR FILTER

Use a screwdriver to remove the transportation cover from the air filter connection Screw in the supplied air filter as shown in fig.4.

## 5. OPERATION

- ❑ **WARNING!** Ensure that you have read, understood and applied Section 1 Safety Instructions.

**IMPORTANT:** 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, and could damage the compressor.

**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 the losses within the compressor.

### 5.1. BEFORE STARTING THE EQUIPMENT

**IMPORTANT:** Before you connect the equipment to the power supply make sure that the data on the rating plate are identical to the supply voltage.

- 5.1.1. Check the equipment for damage which may have occurred in transit. Report any damage immediately to the transport company which was used to deliver the compressor.
- 5.1.2. Install the compressor in the vicinity of the point of consumption.
- 5.1.3. Avoid long air lines and supply lines (extension cables).
- 5.1.4. Make sure that the intake air is dry and dust free.
- 5.1.5. **DO NOT** install the compressor in a damp or wet room.
- 5.1.6. The compressor may only be used in suitable rooms (with good ventilation and an ambient temperature from +5°C to 40°C). There must be no dust, acids, vapours, explosive gases or inflammable gases in the room.
- 5.1.7. The compressor is designed to be used in dry rooms. It is prohibited to use the compressor in areas where work is conducted with sprayed water.
- 5.1.8. Operate the equipment only on a firm, level surface.
- 5.1.9. Use flexible hoses in order to prevent transmitting unacceptable loads to the pipeline system at the connection between the compressor system and the pipeline system.
- 5.1.10. It is essential to use separators, traps and drains which process the liquids produced by the compressor before the compressor system is put into operation.
- 5.1.11. Supply hoses at pressures above 7 bar should be equipped with a safety cable (e.g. a wire rope).

### 5.2. OPERATION

#### 5.2.1. ON/OFF SWITCH

To switch on the compressor, pull out the On/Off switch. Push the switch to turn off (fig.5).

#### 5.2.2. SETTING THE PRESSURE

You can adjust the pressure on the pressure gauge using the pressure regulator (fig.5).

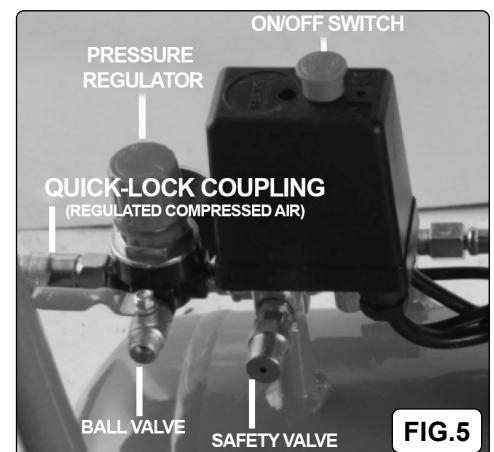
#### 5.2.3. SETTING THE PRESSURE SWITCH

The pressure switch is set at the factory. Cut-in pressure approx. 6 bar. Cut-out pressure approx. 8 bar. The set pressure can be drawn from the quick-lock coupling (fig.5).

- ❑ **WARNING!** Water that is allowed to remain in the tank during storage will corrode and weaken the air tank which could cause the tank to rupture.

To avoid serious injury drain the tank after each use or daily.

**IMPORTANT:** depressurise the receiver tank at the end of every working day.



## 6. MAINTENANCE

- ▲ **DANGER!** Pull out the power plug before doing any cleaning and maintenance work on the equipment.
  - ✓ Disconnect from all energy supplies before servicing.
  - **WARNING!** Wait until the compressor has completely cooled down to avoid risk of burns.
  - **WARNING!** Always de-pressurise the tank before carrying out any cleaning and maintenance work.
  - **WARNING!** After use, always switch off the equipment immediately and pull out the power plug.
  - **WARNING!** Air contaminants taken into the compressor will affect optimum performance. Example: body filler dust or paint over-spray will clog the pump intake filter and may cause internal damage to pump/motor components. Please note that any parts damaged by any type of contamination will not be covered by warranty.
- 6.1. CLEANING**
- ✓ Clean immediately after every use.
  - ✓ Keep all safety devices, air vents and the motor housing free of dirt and dust.
  - ✓ Wipe the equipment with a clean cloth or blow it with compressed air at low pressure.
  - ✗ **DO NOT** use cleaning agents or solvents. These could damage the plastic parts of the equipment.
  - ✗ **DO NOT** allow water to seep into the device. The ingress of water into an electric tool increases the risk of an electric shock.
- 6.2. CONDENSED WATER**
- IMPORTANT!** To ensure a long service life of the pressure vessel, drain off the condensed water by opening the drain plug each time after using.
- ✓ Check the pressure vessel for signs of rust and damage each time before using.
  - ✗ **DO NOT** use the compressor with a damaged or rusty pressure vessel.
  - ✓ If you discover any damage, please contact the Sealey service centre.
- 6.3. SAFETY VALVE**
- The safety valve has been set for the highest permitted pressure of the pressure vessel. It is prohibited to adjust the safety valve or remove its seal. Actuate the safety valve from time to time to ensure that it works when required. Pull the ring with sufficient force until you can hear the compressed air being released. Then release the ring again.
- 6.4. CLEANING THE INTAKE FILTER**
- The intake filter prevents dust and dirt being drawn in. It is essential to clean this filter after at least every 300 hours in operation. A clogged intake filter will decrease the compressor's performance dramatically. Open the halves of the air filter housing. Use compressed air at low pressure (approx. 3 bar) to blow out all the parts of the filter and then assemble the filter in reverse order. When cleaning, take adequate precautions against dust (e.g. use a suitable face mask).
- 6.5. STORAGE**
- **WARNING!** Pull the mains plug out of the socket and ventilate the appliance and all connected pneumatic tools.
  - ✓ Switch off the compressor and make sure that it is secured in such a way that it cannot be started up again by any unauthorized person.
  - ✓ Store the compressor only in a dry location which is not accessible to unauthorized persons.
  - ✓ Always store upright, never tilted!
- 6.6. TRANSPORT**
- ✓ Transport the equipment only by carrying it by the transport handle.
  - ✓ Protect the equipment against unexpected knocks and vibrations.

## 7. TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
The compressor does not start.	No supply voltage.	Check the supply voltage, the power plug and the socket-outlet.
	Insufficient supply voltage.	Make sure the extension cable is not too long. Use an extension cable with large enough wires.
	Outside temperature is too low.	<b>DO NOT</b> operate the compressor with an outside temperature below 5°C.
	Motor has overheated.	Stop the compressor and allow it to cool.
The compressor starts but there is no pressure.	The non-return valve leaks.	Have an authorised service centre replace the non-return valve.
	The seals are damaged.	Check the seals and have any damaged seals replaced by an authorised service centre.
	The drain plug for condensation water leaks.	Tighten the screw by hand. Check the seal on the screw and replace if necessary.
The compressor starts, pressure is shown on the pressure gauge, but the tools do not start.	The hose connections have a leak.	Check the compressed air hose and tools and replace if necessary.
	A quick-lock coupling has a leak.	Check the quick-lock coupling and replace if necessary.
	Insufficient pressure set on the pressure regulator.	Increase the set pressure with the pressure regulator.



#### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



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#### WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

**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 product.

**Warranty:** Guarantee is 12 months from purchase date, proof of which is required for any claim.

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