



# 50L V-TWIN DIRECT DRIVE AIR COMPRESSOR 3HP

MODEL NO: **SAC05030.V2**

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 instruction manual



**WARNING!**  
Electricity



**WARNING!**  
Hot surface



**WARNING!**  
Automatic start-up

## 1. SAFETY

### 1.1. ELECTRICAL SAFETY

- WARNING!** It is the user's responsibility to check the following:
  - ✓ Check all electrical equipment and appliances to ensure that they are safe before using. Inspect power supply leads, plugs and all electrical connections for wear and damage. Sealey recommend that an RCD (Residual Current Device) is used with all electrical products.
  - Electrical safety information.** It is important that the following information is read and understood:
  - ✓ Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.
  - ✓ Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that they are secure.
  - Important:** Ensure that the voltage rating on the appliance suits the power supply to be used and that the plug is fitted with the correct fuse.
  - ✗ **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. Ensure that any faulty item is repaired or is replaced immediately by a qualified electrician.
- If the cable or plug is damaged during use, switch off the electricity supply and remove from use.
- Ensure that repairs are carried out by a qualified electrician.**

### 1.2. GENERAL SAFETY

- ✓ Familiarise yourself with the application and limitations of the compressor.
- ✓ Ensure the compressor is in good 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.
- ✓ Only use recommended attachments and parts. To use unapproved 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 unit's output pressure.
- ✓ Ensure the air supply valve is turned off before disconnecting the air supply hose.
- ✓ To move the compressor use the handle only. SAC05030 only - lift the compressor so that the front feet have enough clearance for manoeuvring, but maintain the unit's stability.
- ✗ **DO NOT** attempt to lift or move the compressor by any means other than by the handle.
- ✓ Use the compressor in a well ventilated area with a temperature above 5°C, and ensure it is placed on a firm, level 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 any air hose attached is not tangled, twisted or pinched.
- ✓ Keep children and unauthorised persons away from the working area.
- ✗ **DO NOT** dismantle the 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 and **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 and will remain so for some time after shutdown.
- ✗ **DO NOT** attempt to move the compressor by pulling the air tool hose. Only move the compressor by the handle.
- ✗ **DO NOT** use this product to perform a task for which it is not designed.
- ✗ **DO NOT** deface the certification plate attached to the compressor tank.
- ✗ **DO NOT** cover the compressor or restrict air flow around the machine whilst operating.
- ✗ **DO NOT** operate the compressor without an air filter.
- ✗ **DO NOT** allow anyone to operate the compressor unless they have received full instructions.
- ▲ **DANGER! DO NOT** direct the output jet of air towards people or animals.
- WARNING!** The air tank is a pressure vessel and the following safety measures apply:
  - ✗ **DO NOT** tamper with the safety valve and **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 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.
- ✓ Inspection of pressure tank both internal and external.
- ✓ Under the **PRESSURE SYSTEMS SAFETY REGULATIONS 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.
- ✗ **DO NOT** carry out any welding operations on any pressurised parts of the vessel.
- **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.
- ✓ When the compressor is not in use, it should be switched off, disconnected from the mains supply and the air drained from the tank.

## 2. INTRODUCTION

V-Twin pump with aluminium cylinders and cast iron liners for reduced weight and improved resistance to wear. Suitable for general-purpose workshop applications. Pump directly coupled to a heavy-duty induction motor for reliable operation. Precision welded receiver tank manufactured to meet Pressure Vessel Directive. Fitted with fully automatic pressure cut-out switch, air regulator and pressure gauges for tank and supply. Supplied with handle and wheels for easy manoeuvrability. Fitted with 3-pin plug.

## 3. SPECIFICATION

**Model No:**..... SAC05030.V2  
**Air Displacement cfm(L/min):**..... 12.6(357)  
**Fuse Rating:**..... 13A  
**Maximum Free Air Delivery cfm(L/min):**..... 8.75(248)  
**Maximum Pressure:**..... 130psi(9bar)  
**Minimum Rated Supply:**..... 13A

**Motor Output:**..... 3hp  
**Outlet:**..... Quick Release Coupling  
**Phase:**..... 1ph  
**Receiver Capacity:**..... 50L  
**Size (W x D x H):**..... 810 x 420 x 620mm  
**Supply:**..... 230V/13A

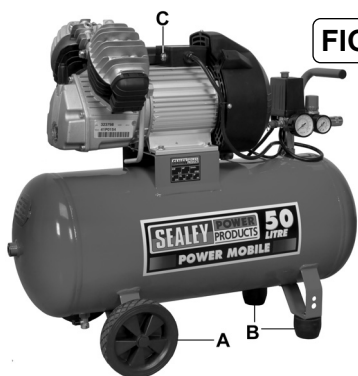


FIG.1

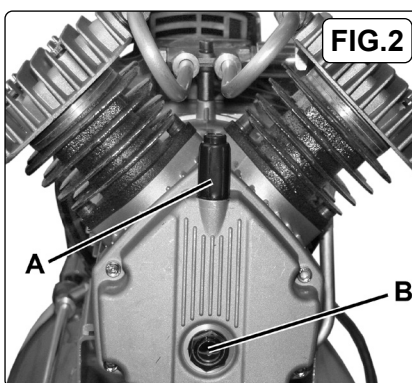


FIG.2

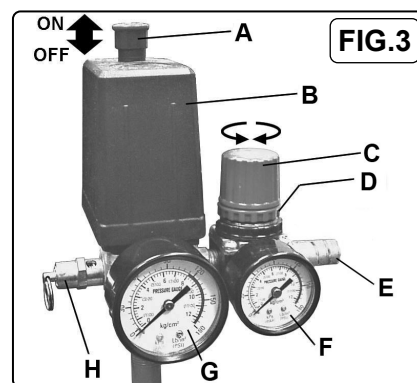


FIG.3

## 4. PREPARATION

- 4.1. Remove compressor from packaging and inspect for any shortages or damage. If anything is found to be missing/damaged contact your supplier.
- 4.2. Save the packing material for future transportation of the compressor. We recommend that the packing is stored 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.
- 4.3. Confirm that the mains voltage corresponds with the voltage shown on the compressor data plate.
- 4.4. Fit the main wheels (fig.1.A) and two rubber feet (fig.1.B) to the main frame using the nuts, bolts and washers supplied.
- 4.5. The compressor should be installed on a flat, firm surface, or one that does not exceed 15° either transversely or longitudinally, and should be in a position that allows good air circulation around the unit.
- 4.6. The compressor is shipped with oil in the pump, but the level needs checking before starting the unit for the first time. Check the oil level by referring to the oil sight glass (fig.2.B). If the oil level is not up to the red centre mark, it should be topped up. Remove the plastic transit plug from the oil filler hole and if required, pour in the recommended oil. (See section 5.6). Screw the filler/breather cap supplied into the aperture as shown (fig.2.A).

## 5. OPERATION

- **WARNING!** Ensure that you have read, understood and apply Section 1 safety instructions.
- 5.1. **IMPORTANT:** The use of extension leads to connect this compressor to the mains is not recommended as the resulting voltage drop reduces motor, and therefore pump, performance.
  - 5.2. 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.
  - 5.3. **STARTING THE COMPRESSOR**
    - 5.3.1. The compressor is fitted with a push/pull type of ON/OFF switch (fig.3.A).
    - 5.3.2. To turn the compressor 'ON' pull the switch knob upwards. To turn the compressor 'OFF' push the switch knob downwards.
    - 5.3.3. Check that the ON/OFF switch is in the "OFF" position and the regulator tap (fig.3.C) is closed (Zero '0' bar, Anti-clockwise).
    - 5.3.4. Plug mains lead into mains supply and start the compressor by pulling the ON/OFF switch knob upwards.
    - 5.3.5. Leave the compressor running with the regulator tap (fig.3.C) set to maximum pressure. Make sure that the pressure in the tank rises and that the compressor stops automatically when the maximum pressure value allowed - written on the specification plate and shown on the gauge (fig.3.G) - is achieved. The compressor will now operate automatically.

The pressure switch (fig.3.B) stops the motor when the maximum tank pressure is reached, and will restart it when pressure falls below the minimum threshold - approx. 2 bar (29psi) less than the maximum pressure.

- 5.3.6. Stop the compressor by pushing the switch knob downwards (fig.3.A). The compressed air inside the compressor head will exhaust, 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 of the socket, as the pressure relief will not then occur 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.

- 5.3.7. The output pressure is regulated by the pressure regulator tap (fig.3.C). Turn the tap clockwise to increase pressure and anti-clockwise to reduce it. The tap can be locked at any required setting by tightening the locking ring (fig.3.D) up against the underside of the tap. 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 reducer.

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 larger gauge (fig.3.G) indicates the pressure inside the main tank. The smaller gauge (fig.3.F) indicates the pressure supplied to the air equipment. Should the pressure in the main tank exceed the pre-set switch (fig.3.B) maximum, the safety valve (fig.3.H) will activate.

- ❑ **WARNING! For this reason DO NOT tamper with, or adjust, the pre-set switch or safety valve (fig.3.B&H).**

- 5.3.8. The compressor is fitted with an overload switch, and a reset trip button located in the connection box on top of the motor (see fig.1.C & fig.6). Should the overload switch activate, switch the compressor off and leave for a few minutes before pressing the trip reset button to reset, and then re-start the compressor. For possible causes of overload switch activation and remedies, see Section 6.

## 6. MAINTENANCE

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

- ❑ **WARNING!** Before performing any maintenance operation, switch off the compressor, disconnect from electrical supply and release all air from the tank.

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

### 6.1. Operations to be carried out after the first 5 working hours:

Check that all nuts/bolts are tight, particularly those retaining the crankcase and cylinder heads.

### 6.2. Operations to be carried out after the first 100 working hours:

Replace the lubricating oil (see 6.6. below).

### 6.3. Operations to be carried out daily:

Drain condensation by opening the valve located under the tank (fig.4). Place a container under the valve to collect any condensation, as it may contain residual oil. Close valve after draining condensation and dispose of it safely.

Regularly clean dirt and dust away from the safety devices with a clean cloth or by blowing with low pressure compressed air.

Generally keep the compressor clean.

### 6.4. Operations to be carried out every 100 hours:

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

Check oil level, top up if necessary.

Remove the filter elements. Turn off the compressor and using stored air from its tank, clean the filters with compressed air (wear eye protection and **DO NOT** direct air towards the body or hands). **DO NOT** operate the compressor without the filters as foreign bodies or dust could seriously damage the pump. Replace the filter elements.

Check for oil leaks.

### 6.5. Operations to be carried out every 200 hours:

Check the automatic cut-out at maximum pressure, and the automatic cut-in at 2 bar below maximum pressure.

Replace air filters (See 5.4).

### 6.6. Operations to be carried out every 400 hours:

Replace the lubricating oil. For oil specifications see below.

Remove the oil filler/breather plug (fig.2.A) then unscrew oil sight glass (fig.2.B).

Drain oil into a suitable container. Drain when the compressor is hot if possible, so that the oil drains rapidly and completely. Incline the compressor to ensure complete drainage. Replace oil sight glass and refill with fresh oil through the oil filler/breather aperture.

**DO NOT** overfill. Replace oil filler/breather plug.

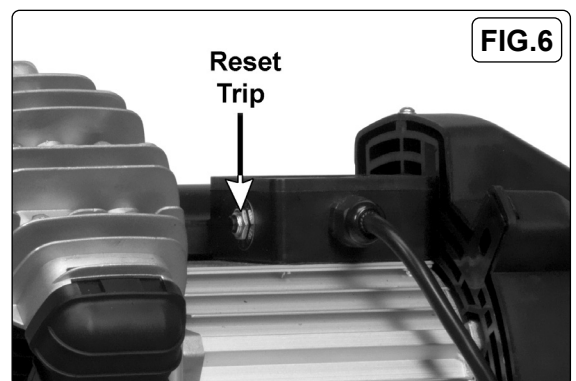
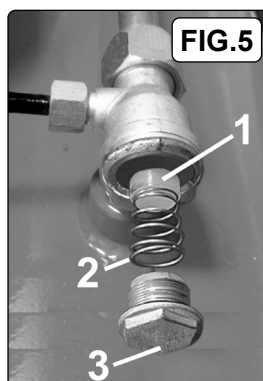
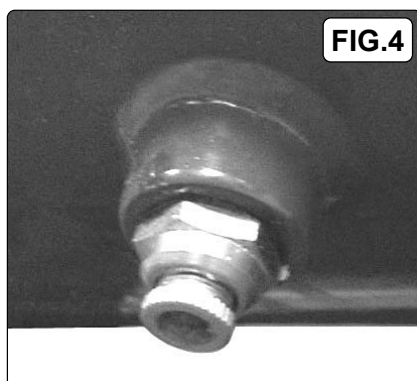
- ❑ **WARNING!** Never mix different oils and do not use non-detergent/low quality oils, as the compressor may be damaged.

Recommended oils: Recommended oil for compressors, suitable for temperatures ranging from +5°C to +25°C: SEALEY CPO or equivalent SAE 40 compressor oil.

- ❑ **WARNING!** Dispose of waste oil only in accordance with local authority requirements.

Check all tube fittings and electrical connections.

Inspect pressure tank inside and out for damage or corrosion.



## 6.7. SCHEDULED MAINTENANCE TABLE

MAINTENANCE OPERATIONS	DAILY	100 HRS.	200 HRS.	400 HRS.
Drain condensation	•			
Check oil level		•		
Clean intake filter		•		
Check for oil leaks		•		
Check cut-out		•		
Replace oil				•
General cleaning of compressor	•			
Internal & external inspection of tank				•
Replace air filter			•	
Check tube fittings and electrical connections				•

- 6.8. IMPORTANT WARNING** - Air contaminants taken into the compressor will affect optimum performance. Example: Body filler dust or paint overspray 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.

## 7. TROUBLESHOOTING

FAULT	CAUSE	REMEDY
Pressure drop in the tank.	Air leaks at connections.	Run compressor to max. pressure, switch off unit. 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 (fig.5.3) and clean, or if necessary, replace the seal (fig.5.1).
Compressor stops and does not restart.	Motor failure.	Contact Authorised Service Agent.
Overload switch activated (Fig.6).	Occasionally the start up load may activate switch.	Leave for a few minutes then press the reset button.
	Extension lead too long.	Remove extension lead and test the compressor by connecting as near to the main fuse box as possible.
	Head unloader not operating	Contact Authorised Service Agent.
Compressor does not stop at max. pressure.	Pressure switch fault.	Contact Authorised Service Agent.
	Filter clogged.	Clean or replace filter element.
	Head gasket or valve fault.	Contact Authorised Service Agent.
Compressor noisy with metallic knock.	Bearing or piston damage.	Contact Authorised Service Agent.



#### 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. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on [technical@sealey.co.uk](mailto:technical@sealey.co.uk) or 01284 757505.

**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.

Sealey Group, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk. IP32 7AR



01284 757500



[sales@sealey.co.uk](mailto:sales@sealey.co.uk)



[www.sealey.co.uk](http://www.sealey.co.uk)