# POWER INSTRUCTIONS FOR: PRODUCTS PETROL ENGINE COMPRESSOR MODEL No: SA4050/55

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

- ✓ Familiarise yourself with the application and limitations of the compressor.
- A Ensure that the compressor is in good order and condition before use. If in any doubt do not use the unit and contact a service agent.
   WARNING! Compressor must only be serviced by an authorised agent. DO NOT tamper with, or attempt to adjust the pressure switch or the safety valve.
- Before moving or maintaining the compressor ensure 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 for any accessory used with the compressor. Ensure that the safe working pressure of any air appliance used, exceeds the output pressure of the compressor. If using a spray gun, check that the area selected for spraying is provided with an air change system or adequate ventilation.
- ✓ Ensure that the air supply valve is turned off before disconnecting the air supply hose.
- ✓ To move the compressor use the front roll bar. Lift the compressor so that the front legs have enough clearance for manoeuvring but maintain the 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. Remember that the compressor engine produces potentially harmful exhaust fumes.
- ✓ Keep tools and other items away from the compressor when it is in use, and keep area clean and clear of unnecessary items.
- ✓ Ensure that the air hose is not tangled, twisted or pinched.
- ✓ Keep children and unauthorised persons away from the work area.
- x DO NOT dis-assemble the compressor for any reason. The unit must be checked by qualified personnel only.
- **X** DO NOT operate the compressor 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** deface the certification plate attached to the end of the compressor tank.
- ▲ DANGER! DO NOT direct the output jet of air towards people or animals.
- **x DO NOT** operate the compressor without an air filter.
- **x** DO NOT allow anyone to operate the compressor unless they have received full instructions.
- ✓ For safety instructions relative to the maintenance and use of the petrol engine refer to the engine instruction manual.
- x DO NOT check the ignition system by removing the spark plug or spark plug lead. Use specific tester or contact service agent.
- WARNING! DO NOT touch the spark plug or plug lead whilst the engine is running severe, potentially fatal, electric shock may result.
- Ensure that engine fuel is stored in an approved container. For long term storage ensure that the fuel tank is drained and that the compressor is adequately protected.
- **X** DO NOT smoke or have any naked flames nearby whilst re-fuelling.
- **x DO NOT** leave the compressor operating unattended.
- **x DO NOT** remove the fuel cap whilst the engine is running.
- X DO NOT refuel the engine whilst it is running. Stop the engine and allow it to cool for two minutes before attempting to refuel.
- X DO NOT refuel in a closed or poorly ventilated environment as there is a danger of explosion or fire. Refuel outdoors.
- **X** DO NOT operate the compressor if there is a fuel leak. Move the unit to a safe area, where
- there is no risk of ignition, until the leak has been rectified and the machine is dry.
- **x DO NOT** start the engine if there are any flammable materials near the exhaust system or in the path of the exhaust gases.
- **x DO NOT** block the engine ventilation grills.
- **X** DO NOT cover the compressor or restrict air flow around the machine whilst it is operating.
- □ WARNING! The air tank is a pressure vessel and the following safety measures apply:
- X 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.
- X DO NOT subject the tank to impacts, vibration or to heat and DO NOT allow contact with abrasive or corrosive materials.
- ✓ DO drain condensation from tank daily and inspect inside walls for corrosion every 12 months.
- ✓ The tank shell must not fall below the certified thickness at any point.
- ✓ When not in use, store the compressor carefully in a safe, dry, childproof location.



# 2. INTRODUCTION & SPECIFICATION

The SA4050/55 Compressor has a twin cylinder pump powered by a 5.5hp petrol engine and is capable of supplying air at up to 8 bar from a 50 litre tank. In addition to pneumatic tools, the compressor may be connected to accessories suitable for blowing, washing and spraying. Being petrol driven allows operation where a mains electricity supply is not available.

## 2.1. SPECIFICATION

	Model	Engine Output (hp)	Fuel	Pump Type	Pump Speed (rpm)	Piston Displacement (cfm)	Free Air Delivery (cfm)			Tank	Max.	Noise
							Max.	At 2.5 Bar*	At 6.0 Bar*	(I)	Pressure (psi/bar)	Level (dB.A)
	SA4050/55	5.5	Unleaded Petrol	K17	1250	14.2	13.8	13.5	11.9	50	116/8	83

\* Note: 2.5 bar is recommended pressure setting for spraying 6.0 bar is recommended pressure setting for air tools

## 2.2. WEIGHT & DIMENSIONS

Model	Weight (kg)	Dimensions Length x Width x Height (mm)
SA4050/55	63	835 x 430 (485 over tyres) x 795



## 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. The compressor should be operated in a position that allows good air circulation around the unit and where there is good ventilation. Remember that the compressor engine produces potentially harmful exhaust fumes.

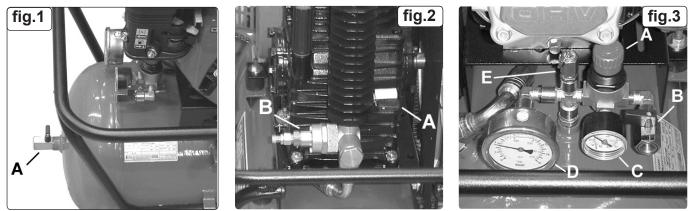
## 4. OPERATION

U WARNING! Ensure that you read, understand and apply Section 2 Safety Instructions.

## 4.1. STARTING

IMPORTANT! Always check and, if necessary, top-up the engine oil and the pump oil before starting. Severe engine and/or pump damage may otherwise result.

- 4.1.1. Check that the air outlet valves one on the tank end-plate (fig.1.A) and one on the regulator (fig.3.B) are closed.
- 4.1.2. Open the pressure vent valve on the pump outlet (fig.2.A).
- 4.1.3. Start the compressor engine, following the procedure detailed in the manufacturer's handbook supplied.
- 4.1.4. When the engine is running smoothly, close the vent valve (fig.2.A).
- 4.1.5. The compressor will now operate automatically, building up the pressure in the tank, which is shown on pressure gauge (fig.3D), to the maximum (factory set). When the maximum tank pressure is reached, the relief valve (fig.2.B) will automatically vent the pump output. When the tank pressure falls below the minimum threshold (approx.2 bar/29psi less than the maximum pressure), the relief valve (fig.2.B) will automatically close and the tank pressure will increase back to maximum.
- Note: a) If the relief valve does not cut in and out, but is continuously closed 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.D) indicates the pressure inside the tank, NOT the pressure supplied to the air equipment. If the pressure in the tank exceed the relief valve (fig.2.B) maximum, a safety valve (fig.3.E) will open. WARNING! For this reason DO NOT tamper with, or adjust, the relief valve or the safety valve.



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All performance figures are ± 5%

#### STOPPING 4.2.

To stop the compressor turn the engine ignition switch (fig.4) to Off (O). See the engine 4.2.1. manufacturer's handbook for the complete engine shutdown procedure.

#### 4.3. CONNECTING AIR POWERED EQUIPMENT

- After fitting the desired coupling to the outlet valve (fig.3.B) connect the air hose and 431 equipment.
- 4.3.2. Adjust the regulator valve (fig.3.A) to the required output pressure (in accordance with the air equipment instructions) by lifting and turning the regulator knob. Push the knob down to lock it at the required pressure (see output gauge, fig.3.C). Turn on outlet valve (fig.3.B). Note: To determine the correct working pressure and air flow requirements for any piece of

# equipment

check the corresponding manual. Be aware that the air flow figure stated on tools and

accessories refers to 'Free Air Delivery' and not the piston displacement of the compressor. When adjusting the regulator, always adjust up to the required pressure.

To disconnect equipment, turn the regulator valve anti-clockwise to 'zero' (0) bar. Operate the equipment to depressurise the air line 4.3.3. and then disconnect from the compressor.

#### WHEN WORK IS COMPLETE 4.4.

At the end of each working day, drain any moisture from the main tank. Place a container under the drain plug and then carefully unscrew it (fig.5). DO NOT allow moisture to accumulate in the tank as this will corrode the inside and affect the pressure rating of the tank

WARNING! Wear safety goggles when performing this task.

## 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! Service and maintenance must be performed by an authorised agent. DO NOT tamper with, or attempt to adjust, the pressure switch or safety valve. Before moving, or carrying out any maintenance on the compressor, ensure that the ignition switch is 'off' and that the air tank pressure has been vented.

- ENGINE 5.1.
- See the engine manufacturer's handbook (supplied) for the engine maintenance schedule.
- 5.2. COMPRESSOR (LESS ENGINE)
- 5.2.1. Operations to be carried out after the first 50 working hours:
  - a) Check that all bolts/nuts are tight, particularly those retaining the crank case and cylinder head. b) Replace the lubricating oil - see para 5.2.6.
- 5.2.2.
- Operation to be carried out daily: a) Drain condensation by opening the valve (fig.5.C) located under the tank.
- 5.2.3. Operations to be carried out monthly (or more frequently, if the compressor operates in a very dusty atmosphere): a) Check oil level and, if necessary, top-up.
  - b) Remove the air filter element (fig.7) by twisting of the filter end cover. Clean the filter by blowing through from the clean side, with an air line at low pressure. Do not operate compressor without filter as foreign bodies or dust could damage the pump. **WARNING!** Wear safety goggles when performing this task.
  - c) Check belt tension
  - d) Check for oil leaks
- 5.2.4. Operation to be carried out 3-monthly: a) Check tank for internal corrosion.
- 5.2.5. Operations to be carried out every 500 hours: a) Change air filter element

b) Check the automatic cut-out at max. pressure and the automatic cut-in at 2 bar below.

- 5.2.6. Operations to be carried out every 1000 hours: a) Replace the lubricating oil. For oil specifications see 5.4.
  - Remove the oil breather (fig.6.A) and screw (fig.6.B), draining the oil into a container. Drain when the compressor is hot so that oil drains rapidly and completely.

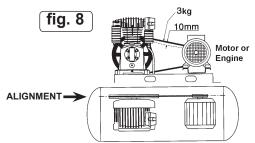
Replace the screw and refill through the filler aperture. Do not overfill. Replace the breather. WARNING! Never mix different oils and do not use non-detergent/low quality oils as the compressor may be damaged.

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

b) Check belt tension. A weight of 3kg applied at the belt mid-point should give a deflection of approx. 10mm (fig.8). If adjustment is required remember to maintain the alignment of the two pulleys (fig.8). Adjust by repositioning the engine, using the screw adjuster provided in the base plate.

- c) Check all tube fittings and electrical connections.
- d) Inspect pressure tank inside and out for damage or corrosion.



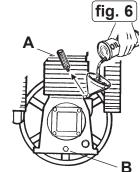


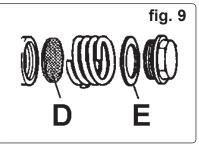
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fig. 5





#### SCHEDULED MAINTENANCE TABLE 5.3.

Maintenance Operations	Daily	Monthly	3 Monthly	500 hrs.	1000 hrs.
Drain condensation	•				
Check oil level		•			
Clean intake filter		•			
Check belt tension		٠			
Check for oil leaks		•			
Check tank for internal corrosion			•		
Replace air filter				•	
General cleaning of compressor				•	
Internal & external inspection of tank					•
Replace oil					•
Check tube fittings and electrical connections					•
Check condition of belt and pulleys					•

#### **RECOMMENDED OILS** 5.4.

Recommended oil for compressors, suitable for room temperatures ranging from +5°C to +25°C.

SEALEY CPO or equivalent SAE 40 compressor oil.

Room temperature below +5°C: SAE 20 compressor oil.

Approximate oil capacity: 1.2 litres.



# 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 drops when compressor is idle	Non-return valve seal defective	Empty air tank, remove the relief/non-return valve (fig.2.B & fig.9) and clean the seat 'D'. If necessary replace the seal 'E'			
Safety valve operates below max pressure	Faulty valve	Contact Authorised Service Agent.			
Engine and pump run but no air produced	Valves leaking or head gasket damaged	Check for leaks, or Contact Authorised Service Agent.			
Engine stops and does not restart	Out of fuel or engine fault.	Check fuel. If OK, Contact Authorised Service Agent			
Relief valve does not open when max. pressure is reached, safety valve operates.	Valve failure or valve incorrectly set	Contact Authorised Service Agent.			
Compressor does not achieve max. pressure and overheats	Head gasket or valve fault	Contact Authorised Service Agent.			
Compressor makes metallic rattle	Bearing or piston fault	Contact Authorised Service Agent.			

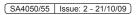
NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. **IMPORTANT:** No liability is accepted for incorrect use of this product. E

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Sole UK Distributor, Sealey Group,



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



www.sealey.co.uk

📇 01284 703534 🛛 📷 sales@sealey.co.uk

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