

# Sale Engineering Products      Issue A. SEP Range air Compressor Operation & Maintenance

## Description

The compressors comprises of an air-cooled reciprocating air compressor pump unit. Which is directly driven by a standard electric motor. The compressor is mounted upon a base plate with integral wall brackets and anti-vibration mounts.

The compressor is fitted with:

- Pressure switch to enable automatic "stop/ start" control
- Off loading valve
- Non- return valve
- Pressure safety valve
- On delay Timer (where fitted)
- Thermal overload and an isolator (where specified as an option)
- 500mm flexible hose-supplied loose.

## Installation

Take care to install or operate the compressor in a cool, clean and dry location. This will provide enhanced performance, reliability and better quality compressed air. The compressor should be wall mounted (4 x M10 mounting holes) the brackets must be securely bolted to the wall to which they are being mounted. The delivery line should be linked with the system pipe work using the flexible hose provided.

## Safety

It is required that users employ safe working practices when using this equipment and your attention is drawn to the Health and Safety at Work Act 1974, the electrical engineers regulation and any other current, pending or future safety requirement.

**DO NOT operate this compressor until you have read and fully understand the contents of these operation & maintenance instructions, particularly with regard to stopping, starting, maintenance and safety.**

## Before you start the compressor

1. Remove all packing materials from the compressor.
2. Position the compressor in a cool, well-ventilated and dry area.
3. Locate electrical supply compatible to the compressor motor and connect to the supply in accordance with the enclosed instructions and wiring diagram.
5. Check oil level with the dipstick, if required, fill or "top up" with the correct grade oil to the oil level mark on the dipstick and replace filler plug or dipstick in the crankcase.

## To start the compressor

1. Check and ensure that all valves and open ends on the pipe work system are closed.
2. Press start button mounted on the starter/ pressure switch. Or isolator where fitted.
- 3. Check for correct direction of rotation of compressor**  
(3 phase compressors should rotate in direction of arrow)

## On Delay Timer

The compressors are fitted with an on delay timer.

**(415v Compressors must have a Neutral)**

To commission a pipe system the starter cover should be removed and the timer should be adjusted to the minimum setting of 1 minute.

Once the pipe work reaches pressure the on delay timer should be readjusted to 10 minutes. This device will only allow the compressor to start after the time delay specified, thus preventing the compressor hunting and overheating, therefore prolonging the life of the compressor. Refer to wiring diagram for further details. NB once on line the compressor will not start until the time has elapsed.

**To stop the compressor**

1. Press stop button on starter / pressure switch.

**DO NOT switch machine ON or OFF using the mains switch.**

2. Alternatively use the isolator where fitted (optional)

**Maintenance**

**WARNING:**

Before carrying out any maintenance it is required that the following points be observed:

1. Isolate the compressor from the mains supply.
2. Isolate from pipe work system or flexible hoses etc.
3. Check that all air pressure has been released from the compressor and delivery line.
4. Attach " **DO NOT OPERATE**" signs to the compressor and power supply.
5. After use some components on the compressor are hot and therefore could cause burns. Ensure that the compressor is fully cooled before handling or attempting any maintenance.

**Regular Maintenance**

To ensure continued reliability and efficiency, it is important that regular maintenance is carried out.

The condition of lubricants, the general cleanliness of the machine and the prevention of the ingress of dirt into the working components of the compressor are important factors.

**Maintenance Schedule**

Every two weeks check oil level and top up if required.

Every month clean air intake filter.

**Every 6 months**

1. Drain old oil into a suitable container and dispose of. Replace drain plug and refill the compressor with fresh oil. Replace filler plug / dipstick
2. Clean external surfaces of the compressor removing any dirt from the cylinder, cylinder head, motor fins and motor cowl; this will maintain efficient cooling.

**Every Year**

1. Check valves and replace if worn or damaged.
2. Replace cylinder head joints.
3. Replace air intake filter.

**Lubrication**

Lubrication for the compressor is achieved by a simple splash system, periodic

checking of the dipstick level is required as per the maintenance schedule:  
Recommended lubricants for the above compressors in temperate climatic conditions are ISO 100 dedicated compressor oil or alternatively SAE 30 mineral or synthetic oil.  
The Capacity of oil in the crankcase is 0.2 litres

### **Electrical Connections**

**Dangerous, potentially lethal voltages are present within this equipment therefore care must be taken to ensure that all electrical connections remain firm and that cables do not wear, or be in contact with excessive heat.**

### **Safety Valve**

A pre-set safety valve is fitted to the compressor. The safety valve will release air should the pre-set air pressure be reached (approximately 6 BAR)

### **Pressure Switch Adjustment**

The delivered air pressure from the compressor can be adjusted as follows:

1. Switch the compressor off and isolate from the electrical supply.
2. Remove pressure switch cover.
3. Locate adjusting screw (The large screw in the centre of the switch).  
Turn clockwise to increase pressure and turn anti-clockwise to decrease pressure.
4. The differential may also be adjusted. Locate the adjusting screw (the small screw in the top left of the switch) and turn clockwise to increase the differential and anticlockwise to reduce.
5. Replace pressure switch cover. Ensure switch is on before attempting operation
6. Test for correct pressure by starting and operating in the normal manner, repeat if necessary

**\*WARNING\***

**DO NOT attempt to increase the pressure beyond the specified maximum.**

### **Warranty**

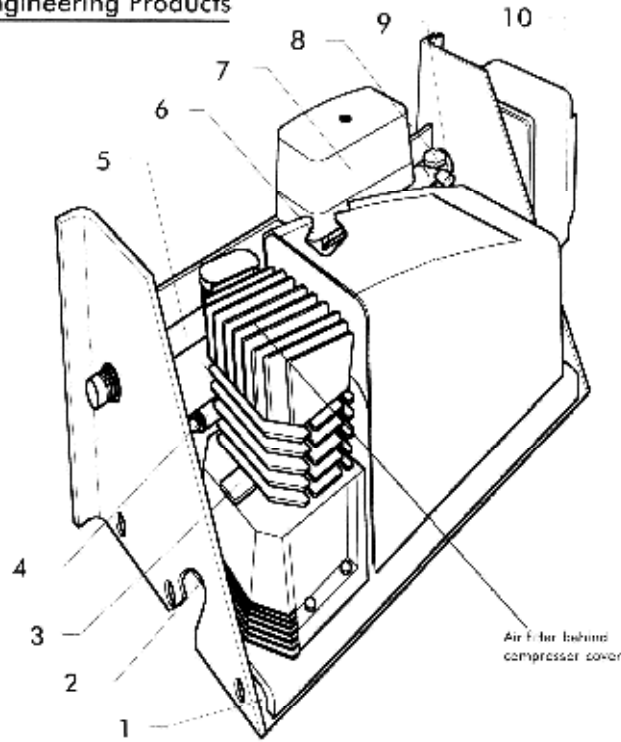
The manufacturer specifies conditions of warranty.

### **Spare Parts**

Only use genuine spare parts. The use of non-genuine spare parts will invalidate the warranty and affect the reliability and service life of the compressor. Genuine spare parts, service kits, oils and accessories are available from your supplier.

**N.B. In the event of difficulties understanding these instructions or operating the compressor contact your supplier immediately. Or Sale Engineering Products on 01925 810 889**

**Sale Engineering Products**



No.	Description
11	Flexible Hose supplied loose
10	Starts Thermal Overload, On Delay Timer
9	Integral Flexible Hose
8	Non Return Valve
7	Pressure Switch
6	Off Loading Valve
5	Delivery Line
4	Safety Relief Valve
3	Oil Filler Plug / Dipstick
2	Oil Drain Plug
1	Anti Vibration Mounts