Clarke®

air

PIONEER 100 AIR COMPRESSOR

OPERATING & MAINTENANCE INSTRUCTIONS

CE

0104

Clarke INTERNATIONAL

SPECIFICATIONS

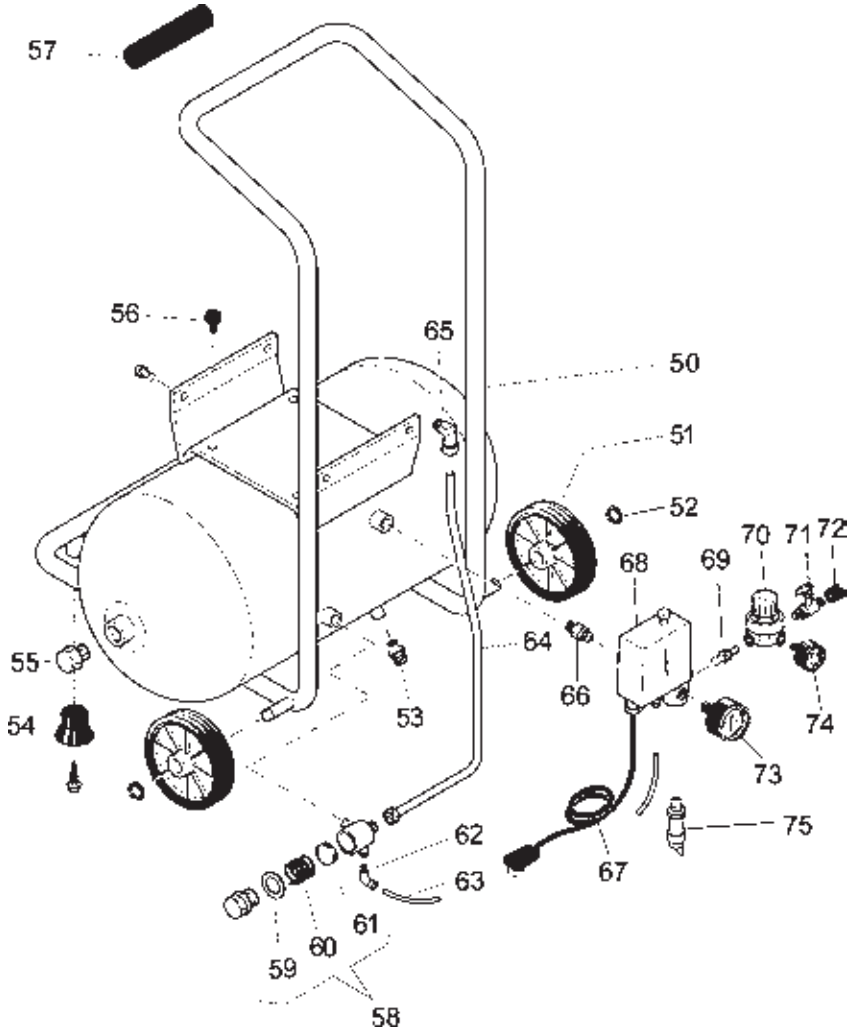
Rotational Speed	2850 rpm
Max. Pressure	8 bar (116psi)
Air Displacement	100Ltrs/min
Electric Motor	0.65HP (0.48HP)
Receiver	10 Ltr
Compressor Oil	CLARKE SAE 40
Fuse Rating 230V	13amps
110V	16A
Gross Weight	25.5kgs
Part Number 230V	2320033
110V	2320035
Duty Cycle	S1* at 7bar

***The compressor may be run continuously at an output pressure of 7bar**

Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice. Always consult the machine's data plate

PARTS DIAGRAM

RECEIVER ASSY



SPARE PARTS

No.	Description	Qty	Part No
50	Tank	1	FN164A51000V
51	Wheel	2	FN020006000
52	Circlip	2	FN015018000
53	Drain Cock	1	FN022020000
54	Foot	2	FN116011006
55	Plug	2	FN011008000
56	Vibration Damper	4	FN199575000
57	Handle	2	FN116022015
58	Non Return Valve	1	FN347043000
59	Gasket	1	FN010041000
60	Spring	1	FN047113002
61	Seal	1	FN047129001
62	Elbow	1	FN011055000
63	Rilsan Tube	1	FN046001000
64	Delivery Tube	1	FN101GE0011
65	Elbow	1	FN011015000
66	Nipple	1	FN199110140
67	Power Cord With Plug **240V**	1	FN101GA0200
67	Power Cord **110V**	1	FN165E03200
68	Pressure Switch	1	FN321028000
69	Nipple	1	FN011017000
70	Pressure Reducer	1	FN319100000
71	Line Cock	1	FNA04093100
72	Slotted Nut	1	FN116011065
73	Pressure Gauge	1	FN330006000
74	Pressure Gauge	1	FN330004000
75	Relief Valve	1	FN047205000

Thank you for purchasing this Pioneer Air Compressor which is fitted with a 10litre air receiver.

Before attempting to operate the machine, please read this leaflet thoroughly and carefully follow the instructions given. In doing so you will ensure the safety of yourself and that of others around you, and you can also look forward to the compressor giving you long and satisfactory service.

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned without prior permission.

This guarantee does not effect your statutory rights.

CONTENTS

SAFETY PRECAUTIONS

WARNING!

Compressed air can be dangerous.
Follow these safety instructions carefully.

- **NEVER** direct a jet of compressed air at people or animals, or spray paint towards people or animals.

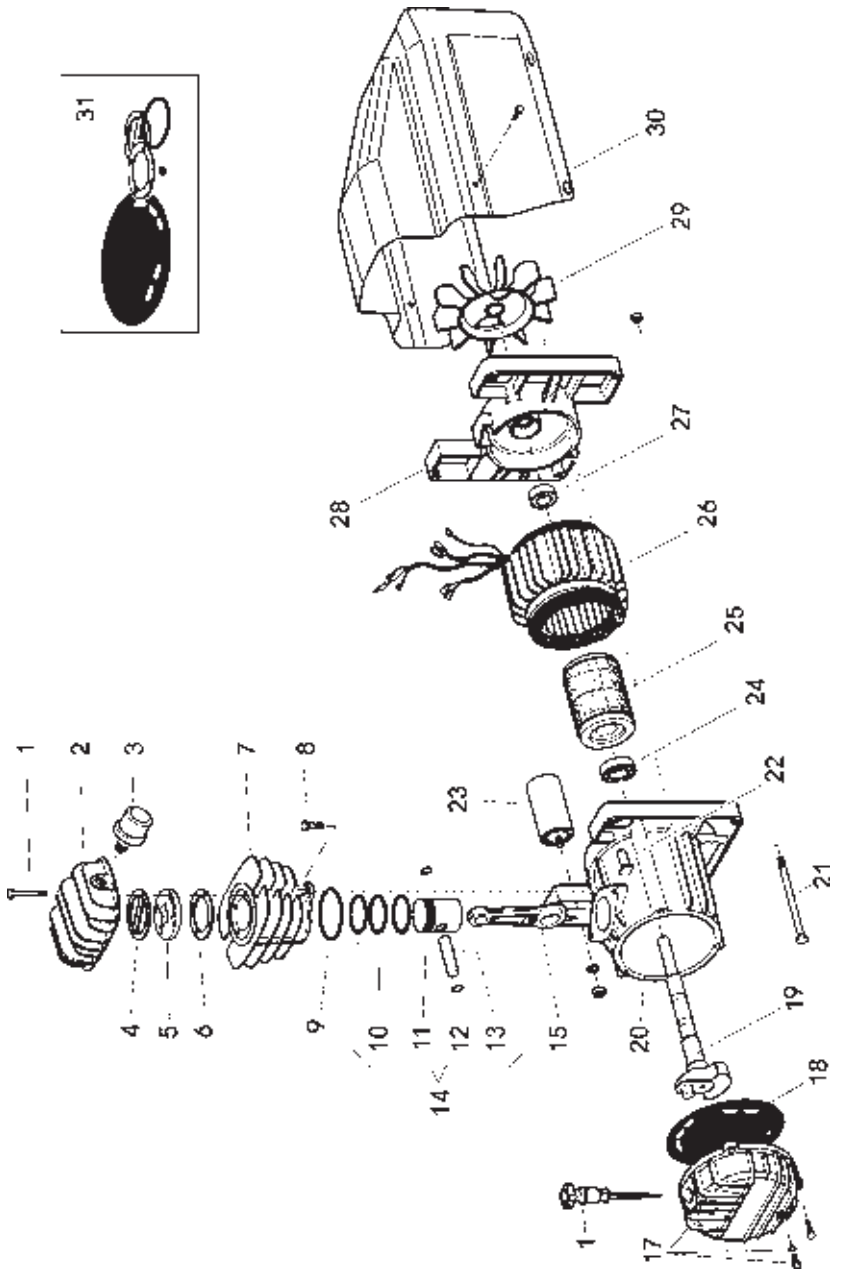
  ALWAYS use appropriate protective equipment, such as Clarke safety-compressed air tools.
- Air compressors work at high pressure. **ALWAYS** inspect equipment and hoses before use, checking for any damage or leaks. Have any damage properly repaired before using the machine again.
- **DO NOT** operate the compressor with any guards removed.
- **DO NOT** adjust or tamper with the safety valve in any way. The maximum working pressure is clearly marked on the compressor.
- The compressor will become hot during operation. **DO NOT** touch the
- **ALWAYS** release any pressure from the air hose (by operating the tool briefly) before disconnecting any hoses or tools.
- **ALWAYS** ensure the pressure is expelled from the air receiver, and the machine is disconnected from the mains supply, **BEFORE** carrying out any maintenance,
- **DO NOT** leave pressure in the receiver overnight, or when transporting.
- **DO NOT** adjust, or tamper with the safety valves. The maximum pressure is factory set, and clearly marked on the machine.
- **ENSURE** that any equipment or tool used in conjunction with your compressor, has a safety working pressure exceeding that of the machine.
- **ALWAYS** consult paint manufacturers instructions, for safety and usage.before spraying any material
- **ALWAYS** ensure that all individuals using the compressor have read and fully understand the Operating Instructions supplied.

When paint spraying:

- **ALWAYS** wear a suitably approved breathing mask when paint spraying, to protect against inhalation of paint spray or fumes. An air feed mask may be required when spraying some types of paint. If in doubt, check the paint manufacturers instructions.
- Make sure there is adequate ventilation. **DO NOT** spray in confined or enclosed areas.
- Many paints are flammable. **DO NOT** smoke while spraying or preparing paints, or spray near a naked flame or heat source.

PARTS DIAGRAM

COMPRESSOR ASSY.



SPARE PARTS

No.	Description	Qty	Part No
1	Screw	4	FN014002026
2	Head	1	FN116034010
3	Intake Filter	1	FN317007000
4	Head Gasket	1	FN116011037
5	Valve Holder Plate	1	FN116034100
6	Cylinder Gasket	1	FN113113034
7	Cylinder	1	FN116034006
8	Screw	2	FN014011064
9	O-Ring	1	FN010114000
10	Piston Ring Set	1	FN216011003
11	Piston	1	FN116011027
12	Circlip	2	FN015001000
13	Gudgeon Pin	1	FN113113003
14	Complete Piston	1	FN416011027
15	Connecting Rod	1	FN116091021
16	Oil Dipstick	1	FN012036000
17	Complete Casing Cover	1	FN116032014
18	Cover Gasket	1	FN116001025
19	Crankshaft	1	FN116034004
20	Casing	1	FN116022051
21	Screw	2	FN116011038
22	Overload Reset **240V**	1	FN008035000
22	Overload Reset **110V**	1	FN008015000
23	Capacitor **240V**	1	FN009200014
23	Capacitor **110V**	1	FN009200026
24	Bearing	1	FN033018000
25	Rotor	1	FN034045000
26	Stator **240V**	1	FN416035605
26	Stator **110V**	1	FN416085601
27	Bearing	1	FN033118000
28	Rear Cover	1	FN116011002
29	Fan	1	FN116001003
30	Housing	1	FN199100070
31	Set Of Gaskets	1	FN216GE0101

ELECTRICAL CONNECTIONS

Connect the mains lead to a standard, 230 Volt (50Hz) electrical supply through an approved 13 amp BS 1363 plug, or a suitably fused isolator switch.

WARNING! THIS APPLIANCE MUST BE EARTHED

IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:

Green & Yellow	-	Earth
Blue	-	Neutral
Brown	-	Live

As the colours of the flexible lead of this appliance may not correspond with the coloured markings identifying terminals in your plug proceed as follows:

- Connect GREEN & YELLOW cord to terminal marked with a letter "E" or Earth symbol "⏚" or coloured GREEN or GREEN & YELLOW.
- Connect BROWN cord to terminal marked with a letter "L" or coloured RED.
- Connect BLUE cord to terminal marked with a letter "N" or coloured BLACK.

If this appliance is fitted with a plug which is moulded onto the electric cable (i.e. non-rewireable) please note:

1. The plug must be thrown away if it is cut from the electric cable. There is a danger of electric shock if it is subsequently inserted into a socket outlet.
2. Never use the plug without the fuse cover fitted.
3. Should you wish to replace a detachable fuse carrier, ensure that the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer or most electrical stockists.

FUSE RATING

The fuse in the plug must be replaced with one of the same rating **(13 amps)** and this replacement must be approved to BS1362.

We recommend that this machine is connected to the mains supply via a Residual Current Device (RCD)

If in any doubt, DO NOT attempt any connections or repairs yourself. Consult a qualified electrician, your Clarke dealer, or CLARKE International Service Dep't on

020 8988 7400 or e-mail: Service@clarkeinternational.com

PIONEER 110 Volt model

Connect the mains lead to a suitable 110V (50Hz) electrical supply through an approved plug or a suitably fused isolator switch.

If using a portable 110V transformer, make sure it has a rated capacity sufficient to take a 13 amp load.

ASSEMBLY

1. Remove the plastic travel plug from the oil filling hole (fig.1) and insert the dipstick (fig.2)

Fig. 1

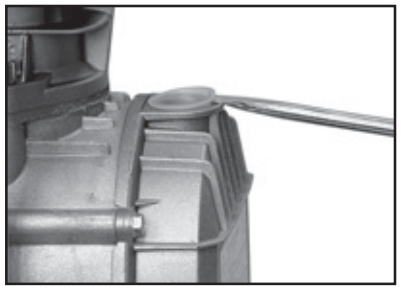
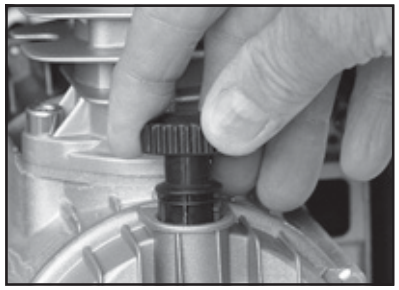


Fig.2



2. Remove the plastic dust cap from the hole in the side of the head, (fig 3), and squirt a few drops of commonly available light oil (3 in 1 or similar), into the cylinder head.

Fig.3

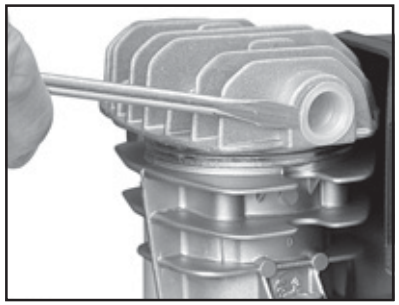
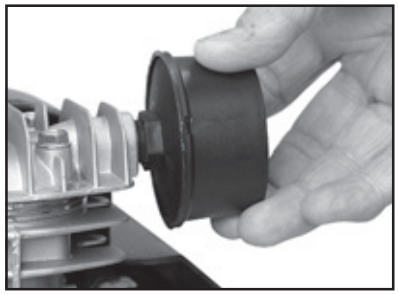


Fig.4



3. Screw on the air intake filter (fig.4)

PREPARATION FOR USE

Fig.5

Check the oil level is at the correct level on the dipstick, as shown in Fig.5. Where necessary, top up with Clarke SAE40 Compressor Oil available from your Clarke dealer.

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PARTS LISTS AND DIAGRAMS

ACCESSORIES

Your Clarke Pioneer Air Compressor can be used in conjunction with a range of optional accessories for inflating tyres, air brushing, stapling, blowing and many other uses. For details contact your local accessory stockist.

A complete kit - **Model KIT 1000**, illustrated below, is available from your Clarke dealer which is ideal for almost all applications.

Please quote part number 3110155

A similar kit is available, without the spray gun - **Model KIT 600, Part No. 3110150**

The accessories are also available separately

Should you experience any difficulties obtaining accessories, please contact the Clarke sales department (telephone 01992 565300) for details of your nearest dealer.

SPARES AND SERVICING

For Spare Parts and/or Servicing, please contact your nearest dealer, or CLARKE International as follows:

PARTS & SERVICE TEL: 020 8988 7400

PARTS & SERVICE FAX: 020 8558 3622

or e-mail as follows:

PARTS: Parts@clarkeinternational.com

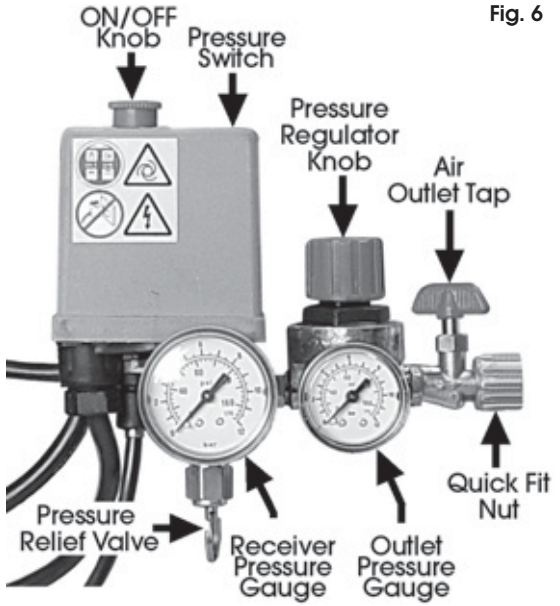
SERVICE: Service@clarkeinternational.com

OPERATION

1. Check that the mains voltage corresponds with that shown on the data sticker on the crankcase cover of the machine.
2. Ensure that the ON/OFF knob on the Pressure Switch is pushed DOWN in the 'OFF' (O) position and then switch on at the mains supply.
3. To start the compressor pull the ON/OFF knob, UPWARDS to the 'ON' (I) position.

NOTE:
Should the motor fail to start immediately it is probable that the air receiver is already full of air. Open the Air Outlet tap, and trigger the air tool if fited, to release air and the motor will start automatically when the tank pressure is reduced.

Fig. 6



4. Before starting any work allow the compressor to run with the air outle cock completely opened, to permit a good distribution of the lubricating oil.
5. Close the outlet tap.
6. Connect the air hose and spraygun, or other air tool, to the compressor outlet, preferably using Quick Fit couplings, readily available from your Clarke dealer, then re-open the outlet tap.
6. Set the operating pressure by adjusting the pressure regulator. To do this, turn the knob - clockwise to increase pressure and anti- clockwise to reduce it.

NOTE:
For normal spraying do not exceed 50 psi (unless following paint manufacturer's instructions). If other attachments are used, for example a tyre inflating gauge, staple gun, paraffin gun etc, it may be necessary to set the operating pressure at a higher (or lower) level. Please refer to the accessory manufacturers' recommendations for optimum operating pressures for their equipment.

7. The Pressure Switch should not require adjustment. This is an automatic device and has been pre-set at the factory to stop the motor when the pressure in the receiver reaches its maximum (115 psi), and to start it again when the pressure in the receiver falls to the minimum precept value. This operation is completely automatic and does not affect the spraying process in any way.

NOTE:
If the machine pumps continuously without cutting-out then the compressor is too small for the application/tool being used, and damage to the machine may result.

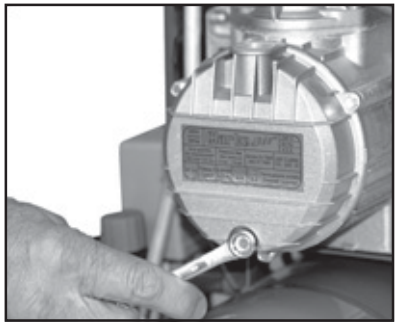
SHUTTING DOWN THE COMPRESSOR

1. Press the ON/OFF switch to the off 'O' position.
   NEVER USE THE MAINS SWITCH TO STOP THE MOTOR.
2. **IMPORTANT!..... ALWAYS** depress equipment trigger (spraygun) to release air from the hose and compressor **BEFORE** disconnecting from the machine.
3. Switch off and disconnect from the mains supply.

MAINTENANCE

1. After the first 5 hours of running the compressor, check the cylinder head bolts and motor housing, screws and re-tighten if any have worked loose.
2. Check the oil level every time you start working and top-up if necessary (use Clarke SAE 40 compressor oil).

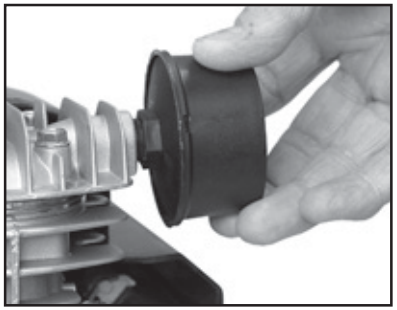
Fig. 7



3. After the first 50 hours use, replace the oil completely (use Clarke SAE 40 compressor oil) and then, after every 100 hours. To empty the oil from the machine, remove the screw on the front of the crankcase cover (fig.7).
4. Every 50 hours use, remove the black plastic air filter (fig.8), then unclip the back cover.

   Remove the filter and wash it in clean soapy water. Allow to dry completely before reassembling. Renew the filter if it is badly contaminated or damaged in any way.

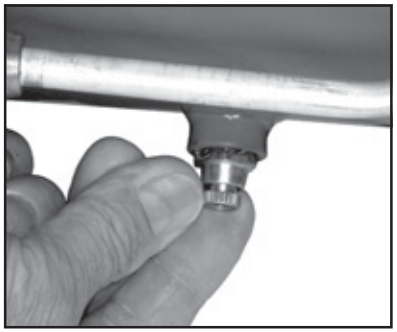
Fig.8



5) At least once a week drain the condensate from the receiver by unscrewing the drain plug underneath the air receiver (fig.9).

NOTE: If the compressor is used on a daily basis, then the tank should be drained before each use.

Fig. 9



6) In the event of an air leak follow the procedure below:

- Load compressor to maximum pressure
- Unplug the compressor
- With a brush and soapy water wet all 'screwed' connections
- Any leaks will show through the formation of air bubbles

NEVER UNSCREW A CONNECTION WHILE THE RECEIVER TANK IS UNDER PRESSURE...ALWAYS MAKE CERTAIN THAT THE TANK HAS FIRST BEEN EMPTIED.