

# REBEL

## OPERATION & MAINTENANCE INSTRUCTIONS

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Thank you for purchasing this Rebel Air Compressor which is available in two configurations - REBEL 30, fitted with a 24 litre air receiver and REBEL60, fitted with a 50 litre receiver. The REBEL 60 is also available in both 230V and 110V configurations.

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.

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## SAFETY PRECAUTIONS

### WARNING

*As with all machinery, there are certain hazards involved with their operation and use. Exercising respect and caution will considerably lessen the risk of personal injury. However, if normal safety precautions are overlooked, or ignored, personal injury to the operator, or damage to property may result. It is in your own interest to read and pay attention to the following rules:*

1. COMPRESSED AIR IS DANGEROUS, NEVER direct a jet of air at people or animals, and NEVER discharge compressed air against the skin.
2. DO NOT operate your compressor with any guards removed.
3. Electrical or mechanical repairs should only be carried out by a qualified engineer. If problems occur, contact your Clarke dealer.
4. Before carrying out any maintenance, ensure the pressure is expelled from the air receiver, and the machine is disconnected from the mains supply.
5. DO NOT leave pressure in the receiver overnight, or when transporting.
6. DO NOT adjust, or tamper with the safety valves. The maximum pressure is factory set, and clearly marked on the machine.
7. DO NOT operate in wet or damp conditions. Keep the machine dry at all times. Similarly, a clean atmosphere will ensure efficient operation. Do not use in dusty or otherwise dirty locations.
8. Some of the metal parts can become quite hot during operation. Take care not to touch these until the machine has cooled down.
9. Always adjust the pressure regulator to the recommended setting for the particular spray gun or tool being used.
10. When spraying inflammable materials e.g. cellulose paint, ensure that there is adequate ventilation and keep clear of any possible source of ignition.
11. Protect yourself. Think carefully about any potential hazards which may be created by using the air compressor and use the appropriate protection. e.g. Goggles will protect your eyes from flying particles. Face masks will protect you against paint spray and/or fumes.
12. Before spraying any material always consult paint manufacturers instructions for safety and usage.
13. Do not exert any strain on electrical cables and ensure that air hoses are not tangled or wrapped around machinery etc.
14. When disconnecting air hoses or other equipment from your compressor ensure that the air supply is turned off at the machine outlet and expel all pressurised air from within the machine and other equipment attached to it.
15. Make sure that children and animals are kept well away from the compressor and any equipment attached to it.
16. Always ensure that all individuals using the compressor have read and fully understand the Operating Instructions supplied.
17. Ensure that any equipment or tool used in conjunction with your compressor, has a safety working pressure exceeding that of the machine.

## ELECTRICAL CONNECTIONS

### REBEL 60, 110V ONLY

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 the load of the air compressor (see specifications on page 11).

### OTHER MODELS

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.

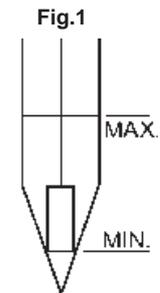
**We recommend that this machine is connected to the mains supply via a Residual Current Device (RCD)**

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](mailto:Service@clarkeinternational.com)**

## PREPARATION FOR USE

**NOTE:** All numbered items throughout this manual refer to the parts list item number on Pages 12 to 15.

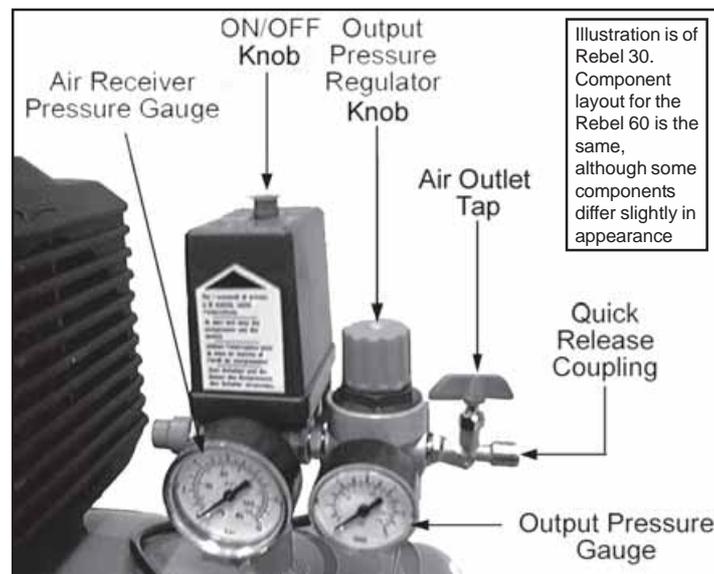
1. Remove the plastic travel plug from the oil filler hole, on the top of the crank case, and insert the dipstick (see Fig. 6 - p.9).
2. Check the oil level is at the correct level on the dipstick, as shown in Fig.1. Where necessary, top up with Clarke SAE40 Compressor Oil (available from your Clarke dealer).



## OPERATION (Ref. Fig. 2)

**NOTE:** if you intend using your compressor for spraying, read also the "Helpful Hints on Spraying" booklet - supplied with the machine.

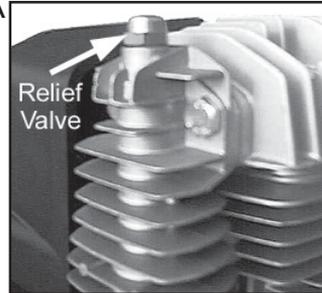
1. Check that the mains voltage corresponds with that shown on the data sticker on the crankcase cover of the machine.
2. Ensure that the ON/OFF knob is in the 'OFF' (0) position, i.e. pushed DOWN, then plug in and switch on at the mains supply.
3. To start the compressor pull UP the ON/OFF knob to the 'ON' (1) position - the motor should start immediately.



**NOTE:**

- a. *Should the motor fail to start immediately, it is probable that the air receiver is already full of air. Check the tank pressure gauge (see fig. 2). If you release air, by opening air outlet tap, the motor will start automatically once the cut-in pressure is reached.*
- b. *The compressor is fitted with a pressure relief valve, shown in fig 2A, to allow 'no load' starting. It is normal for this valve to vent air for a short period when starting.*

Fig. 2A



4. Before connecting your airline to the compressor allow it to run with the air outlet tap completely open, for 10 to 15 seconds, to permit a good distribution of the lubricating oil.
5. Close the outlet tap then connect one end of suitable air hose to the compressor air outlet, and the other end to the equipment to be used.  
Set the outlet pressure by adjusting the Output Pressure Regulator. To do this, turn the knob clockwise to increase pressure, anti-clockwise to decrease.  
The Rebel 60 requires the Regulator Knob to be pulled upwards before it may be turned. Pushing the knob down again holds the pressure setting. Read the operating pressure on the outlet pressure gauge.

**NOTE:**

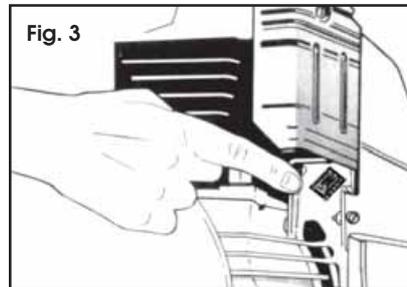
*For most spraywork do not exceed 50 psi (unless following paint manufacturer's instructions). For other airline equipment such as air tools, tyre gauges, staple guns, paraffin guns etc., it may be necessary to set the operating pressure at a higher (or lower) level.*

**IMPORTANT:** Always refer to the accessory manufacturers' recommendations for optimum operating pressures for their equipment.

6. With operating pressure set, re-open the air outlet tap.
7. The Pressure Switch, located within the plastic cover beneath the ON/OFF knob, should not require adjustment. This is an automatic device and has been pre-set at the factory to stop the motor when pressure in the receiver reaches its maximum, and to start it again when the pressure in the receiver falls to the minimum preset value. This operation is completely automatic and does not affect the spraying process in any way. However, should problems develop with the cut-in, cut out settings, please consult your Clarke dealer, or the Clarke Service Dep't.

**NOTE:**

- a. *If the machine pumps continuously without cutting out then the compressor is too small for the application/tool being used, and damage may result. Consult your Clarke dealer.*



b. *The motor is protected by a Thermal Overload so that if the motor overheats for any reason - the thermal overload will trip, stopping the motor. To restart, allow a period for the motor to cool down, before pressing the Reset Button, shown in Fig.3.*

## SHUTTING DOWN THE COMPRESSOR

1. To shut off the compressor, simply press DOWN on the ON/OFF knob (See Fig. 2) . Always use this knob to shut down the compressor. NEVER USE THE MAINS SWITCH TO STOP MOTOR.
2. Close the air outlet tap and trigger the equipment (spray gun, air tool etc) to release air from the air hose before disconnecting the hose from the machine.
3. Before transporting your compressor or when leaving overnight, expel all air from the receiver by opening the drain valve (52).

### NOTE:

*The Rebel 60 incorporates a Regulator/Filter which automatically allows any condensate to drain off when pressure in the reservoir is completely relieved. Water may also be drained off when the system is under pressure. The method of operation is shown in Fig 4.*

Turn the knob, at the base of the filter bowl, to the right to lock it, to the left to unlock.

In the 'unlocked' position, condensate will automatically drain when the pressure in the system is near zero.

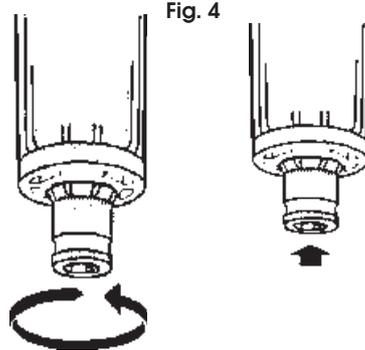


Fig. 4

To blow off condensate when the system is pressurised, push the knob up when it is in its unlocked position.

## MAINTENANCE

### A. DAILY

1. Check the oil level before you start and top-up if necessary - (use Clarke SAE 40 compressor oil available from your local dealer).
2. Drain any condensate that may have accumulated in the receiver by unscrewing the drain plug underneath the air receiver (fig. 5).

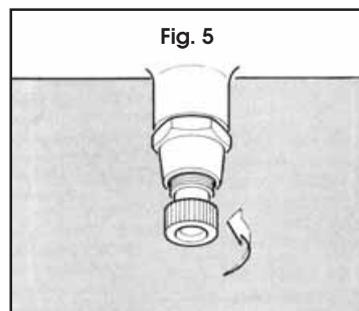


Fig. 5

## B. PERIODICALLY

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. Every 50 hours (more frequently if used in a dusty environment), clean the air intake filter, by carefully removing the single screw securing the plastic cover and withdrawing the sponge element from inside.  
Clean the sponge and the inner housing. If necessary, the sponge filter may be gently washed in warm soapy water, rinsed and allowed to dry thoroughly before refitting. Ensure that the outer filter cover is then screwed back into its original position.  
If any part of the filter is damaged then you should obtain a replacement.

3. After the first 100 hours use, replace the oil completely using Clarke SAE 40 compressor oil. Thereafter, replace the oil completely after every 500 hours of operation or every 6 months.

To empty the oil from the machine, remove the drain plug from the crankcase cover (see fig. 6).

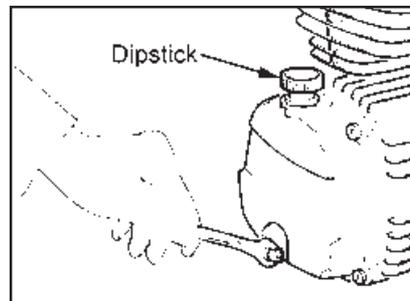


Fig. 6

4. Every 500 hours of operation or every 6 months

- clean all the external parts of the compressor.

(This cleaning makes the cooling process more efficient and prolongs the life of the machine).

- Check and clean the inlet and outlet valves
- Examine the non-return valve and replace the gasket if necessary (fig.7)

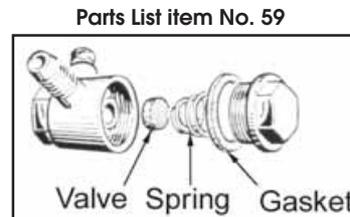


Fig. 7

5. 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' air connections
  - Any leaks will show through the formation of air bubbles.

### WARNING

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

## FAULT FINDING

PROBLEM	PROBABLE CAUSE	REMEDY
The compressor stops and will not start again.	Bad connections.  Blown fuse Overload cutout switch has tripped.	Check the electrical connections. Clean and tighten as necessary. Renew/Replace fuse Switch off and wait 5 minutes before pressing the reset button.
The compressor does not reach the set pressure and overheats easily.	Compressor head gasket blown or valve broken.	Wait for compressor to cool down, disassemble the head and replace any broken components. Carefully clean all sealing surfaces before reassembling. If in doubt contact your nearest dealer.  NOTE: It is also possible that you are using more air than the compressor is capable of delivering.
Compressor does not start.	Air receiver charged (see also item 1)	Open drain cock to expel air. Compressor should start again when pressure reduces to approx 95 psi.
Air leaking from the pressure switch valve when the compressor is not running.	Faulty non-return valve.	First drain the receiver completely of air. Remove the valve end plug, carefully clean the valve seat and the gasket and reassemble. See Fig7.
Air pressure from the regulator will not adjust.	The diaphragm within the regulator body is broken.	Replace Regulator
The compressor is very noisy and makes a metallic knocking sound.	Compressor damaged and needs overhaul.	Return the machine to your nearest service agent.

## SPECIFICATIONS

Rotational Speed .....	2850 rpm
Max. Pressure .....	10 bar
Air Displacement .....	9 cuft/min
Electric Motor .....	2½ hp (1.8kW)
Nominal Rating .....	230 V Models..... 9A
	110 V Models..... 25 Amps
Receiver .....	REBEL 30 ..... 24 LTR
	REBEL 60 ..... 50 LTR
Compressor Oil .....	CLARKE SAE 40
Fuse Rating .....	230 V Models..... 13 Amps
	110 V Models..... 25 Amps
Duty Cycle .....	S1
	(This machine may be run continuously)

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 machines' data plate.

## ACCESSORIES

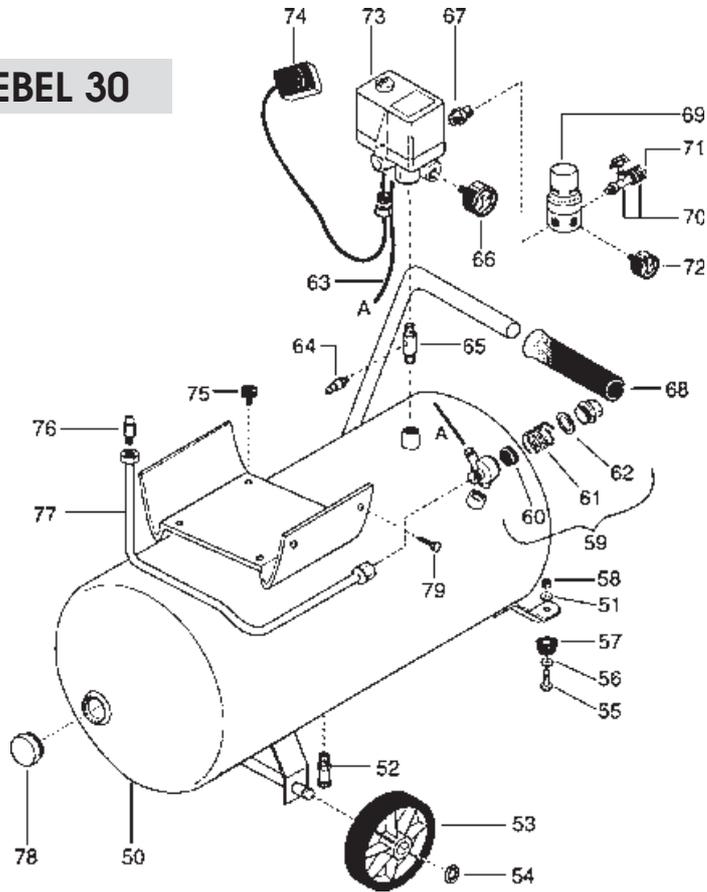
Your Clarke Rebel Air Compressor can be used in conjunction with a range of optional accessories for inflating tyres, air brushing, stapling, blowing and many other uses. For details contact your local accessory stockist. A complete kit is available from your Clarke dealer which is ideal for almost all applications.

### Kit Illustrated - KIT1000 - Part Number 3110155



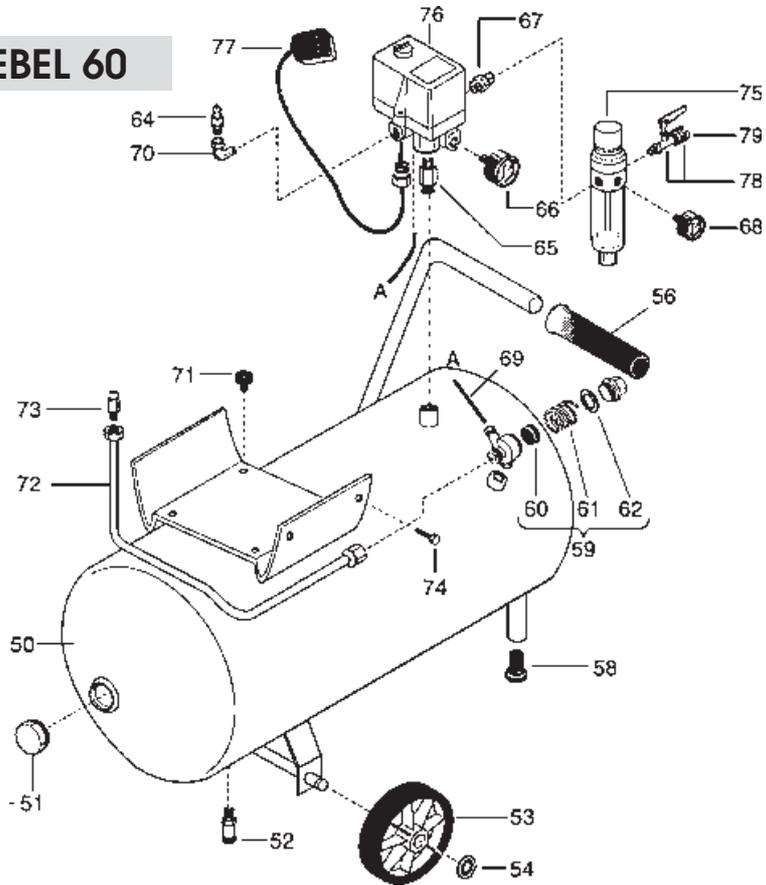
Should you experience any difficulties obtaining accessories, please contact the Clarke sales department (telephone 01 992 565300) for details of your nearest dealer.

## REBEL 30



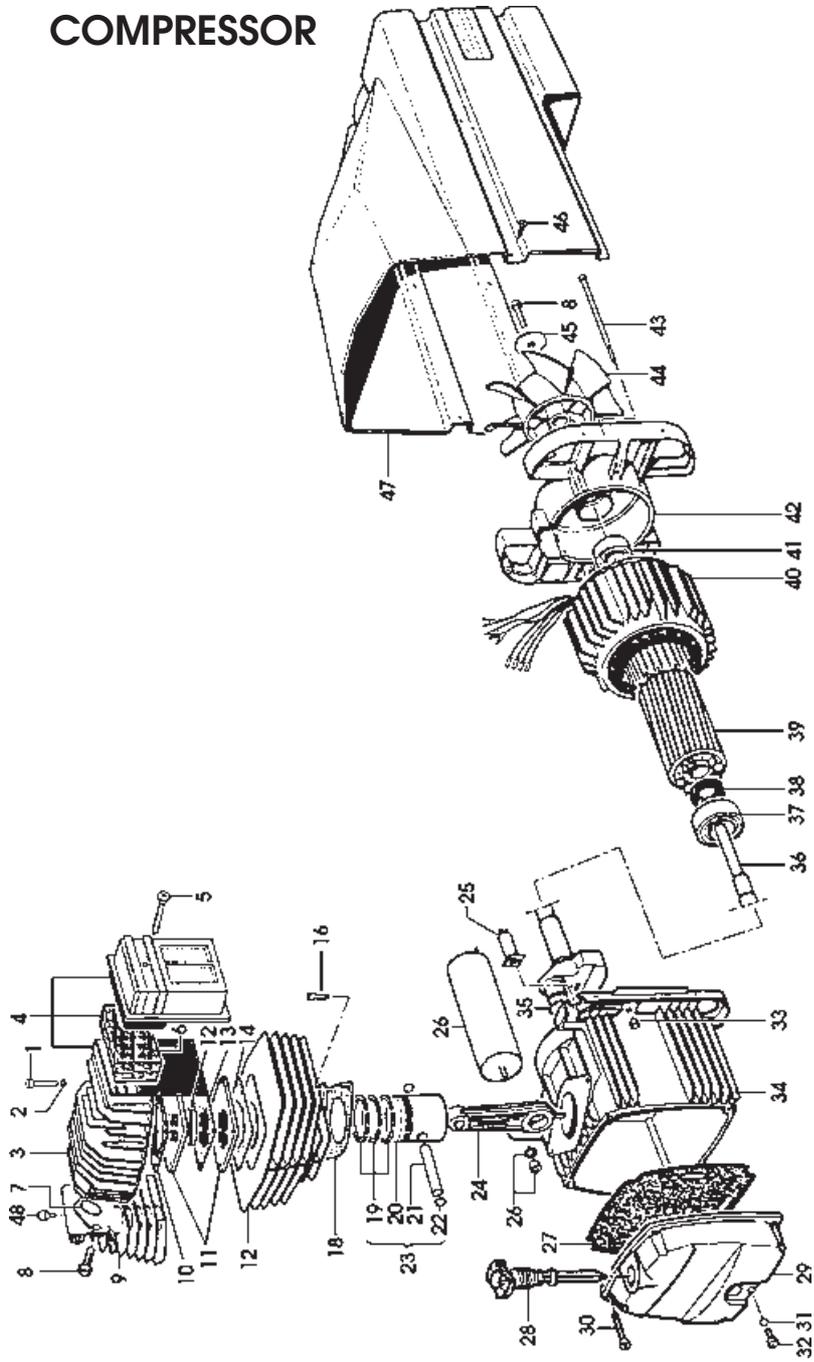
No.	Description	Qty	Part No.	No.	Description	Qty	Part No.
50	Reservoir	1	FN168Z50000V	65	Adapter	1	FN199110220
51	Flat Washer	1	FN014005010	66	Pressure Gauge-Res	1	FN330007000
52	Drain valve	1	FN022020000	67	Adapter	1	FN011017000
53	Wheel	2	FN020022000	68	Handle	1	FN020121000
54	Push On Fastener	2	FN015024000	69	Output Regulator	1	FN319013000
55	Screw	1	FN014001043	70	Tap Assy	1	FN322007000
56	Washer	1	FN014005002	71	Quick Release Conn.	1	FN116011065
57	Anti-vibration Pad	1	FN168E01006	72	Pressure Gauge-Line	1	FN330006000
58	Nut	1	FN014003001	73	Press. Regulator Assy	1	FN321028000
59	Valve Assembly	1	FN347043000	74	Mains lead	1	FN101GA0200
60	Valve	1	FN047113001	75	Anti-vibration pads	4	FN199575000
61	Spring	1	FN047113002	76	Adapter	1	FN011248000
62	Washer	1	FN010041000	77	Pipe	1	FN110GZ0010
63	Tube	-	FN046001000	78	Plug	2	FN011008000
64	Valve	1	FN347027000	79	Screw	4	FN014013042

## REBEL 60



No.	Description	Qty	Part No.	No.	Description	Qty	Part No.
50	Reservoir	1	FN170018000V	67	Adapter	1	FN011017000
51	Plug	1	FN011008000	68	Pressure Gauge-Line	1	FN330006000
52	Drain valve	1	FN022020000	69	Tube	-	FN046001000
53	Wheel	2	FN020001000	70	Elbow	1	FN011002000
54	Push On Fastener	2	FN015029000	71	Anti-vibration pad	4	FN199575000
56	Handle	1	FN020121000	72	Pipe	1	FN170GZ0015
58	Rubber foot	1	FN020093000	73	Adapter	1	FN011248000
59	Valve Assembly	1	FN347043000	74	Screw	4	FN014013042
60	Valve	1	FN047113001	75	Filter/Regulator Assy	1	FN319042000
61	Spring	1	FN047113002	76	Press. Regulator Assy	1	FN321028000
62	Washer	1	FN010041000	77	Mains lead	1	FN101GA0200
64	Valve	1	FN347027000	78	Tap Assy w/conn	1	FN322008000
65	Adapter	1	FN199110140	79	Quick Fit Coupling	1	FN116011065
66	Pressure Gauge-Res	1	FN330007000				

# COMPRESSOR



## COMPRESSOR

No.	Description	Qty	Part No.	No.	Description	Qty	Part No.
1	Head Bolt	4	FN014002043	26	Capacitor (110V)	1	FN009200038
2	Washer	4	FN014005002	27	End Housing Gasket	1	FN116091011
3	Cylinder Head	1	FN11691003	28	Dipstick	1	FN012043000
4	Filter Unit	1	FN317051000	29	End Housing	1	FN116091002
5	Screw	1	FN014020001	30	Screw	4	FN014013021
6	Filter Element	1	FN116091018	31	Washer	1	FN010072000
7	O-Ring	1	FN010085000	32	Screw	1	FN014013024
8	Screw	3	FN014001044	33	Nut	2	FN014003002
9	After Cooler	1	FN116091024	34	Housing	1	FN116091001
10	Head Gasket (Upper)	1	FN116091014	35	Circlip	1	FN015005000
11	Valve Block	2	FN116091012	36	Shaft Assy.	1	FN116091010
12	Valve	2	FN116091019	37	Bearing	1	FN033027000
13	Valve Gasket	1	FN116091013	38	Slip Ring	1	FN010029000
14	Head Gasket (Lower)	1	FN116091015	39	Rotor	1	FN116091020
15	Cylinder Block	1	FN116091008	40	Stator Assy (230V)	1	FN416091604
16	Screw	2	FN014011064	40	Stator Assy (110V)	1	FN416091601
18	Gasket	1	FN116091016	41	Bearing	1	FN033005000
19	Piston Ring set	1	FN213118002	42	End Housing	1	FN116011001
20	Piston	1	FN113118007	43	Screw	2	FN116042020
21	Gudgoen Pin	1	FN113118030	44	Fan	1	FN116091005
22	Circlip	2	FN015001000	45	Washer	1	FN014005010
23	Piston Assy compl.	1	FN413118007	46	Screw	4	FN014006121
24	Con-Rod	1	FN116091021	47	Cover	1	FN010085000
25	Overload (230V)	1	FN008015000	48	Pressure Relief Valve	1	FN011158000
25	Overload (110V)	1	FN008055000	-	Gasket Set	1	FN216091001
26	Capacitor (230V)	1	FN009200026				

## SPARES AND SERVICING

Please contact your local dealer/service agent or the Clarke International on:

**PARTS & SERVICE TEL: 020 8988 7400**

**PARTS & SERVICE FAX: 020 8558 3622**

or e-mail as follows:

**PARTS: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)**

**SERVICE: [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**