

90L BELT DRIVE AIR COMPRESSOR

OWNER'S MANUAL



FOR YOUR SAFETY
PLEASE READ THESE INSTRUCTIONS CAREFULLY
AND RETAIN THEM FOR FUTURE USE.



SPECIFICATION

ITEM	DATA
Model	SC90B
Power	2200W / 3 HP
Voltage	230 V
Frequency	50 Hz
Delivery	14 CFM
Max Discharge Pressure	150 PSI / 10 BAR
Tank Capacity	90 L
Dimensions	990 x 440 x 880 mm
Oil / Oil Free	Oil Lubricated
Wheel Mounted	Yes
Air Outlets	2
Air Outlet Size	1/4"
Net Weight	69 kg
Noise Information	LWA 97 dB

WARNING



Read and understand instructions before use.



Always wear eye/face and hand protection.

WARNING



Risk of electric shock. The compressor must be disconnected from the mains supply before maintenance or removing any covers. Do not use in a damp environment.



Risk of accidental start-up. The compressor could start automatically in the event of a power cut and subsequent reset. Do not carry the compressor while it is connected to the power source, or when the tank is filled with compressed air.



This compressor contains surfaces which may reach a high temperature during operation. Never operate with the motor housing removed.



Air and condensation water can burst from the compressor when the drain plug is removed.



This compressor produces a high sound level during operation. Ear protection should be worn.

SAFETY PRECAUTIONS

KEEP VISITORS/CHILDREN AWAY: Do not allow visitors/children to handle the air compressor or attachments and ensure that any people in the work area are suitably dressed.

KEEP THE WORK AREA CLEAN: Cluttered areas mean accidents, so clear the work area of all unnecessary tools, debris and furniture.

DO NOT TOUCH HOT SURFACES: During operation, the motor, connections, compressor body, cylinder head and tubes may get hot, do not touch.

DO NOT DIRECT AN AIR STREAM AT THE BODY: Do not direct the air stream at people or animals, as injury may result. Compressed air can cause soft tissue damage and propel dirt and other particles at high speed.

BREATHING AIR: This compressor should not be used to supply breathing quality air. Never use it as breathing apparatus.

STAY ALERT: Watch what you are doing, use common sense, and do not operate the air compressor when you are tired. The air compressor should not be used if you are under the influence of alcohol, drugs or any medication that makes you drowsy.

DISPOSAL INFORMATION

The air compressor should be disposed of in a safe and environmentally friendly manner. Contact your local Council for disposal assistance.

SAFETY PRECAUTIONS

DISCONNECT THE AIR COMPRESSOR: Always disconnect the air compressor from the mains power supply and decompress before performing maintenance, changing any parts and when not in use.

MAINS POWER CABLE PRECAUTIONS: Never pull on the cable when removing the plug from the mains socket, or lift the compressor by the mains cable.

AVOID UNINTENTIONAL STARTING: When connecting the air compressor to the mains supply make sure the red button on top of the air compressor is in the OFF (down) position.

STORE THE AIR COMPRESSOR PROPERLY: When not in use the air compressor should be stored in a secure, dry place out of the reach of children. Always lock up the storage area.

MAINTAIN THE AIR COMPRESSOR WITH CARE: If the air compressor is damaged in any way, have it repaired by a qualified engineer.

DO NOT USE EXTENSION LEADS: Using extension leads can cause your compressor motor to burn out. Only use extension hoses.

DO NOT WELD TO THE PRESSURE VESSEL

Do not weld or modify the pressure vessel in any manner.

QUICK REFERENCE



QUICK REFERENCE

1. Guard
2. Capacitor / motor control box
3. Oil breather plug
4. Motor unit
5. Air delivery pipe
6. Air receiver
7. Wheels
8. Oil sight glass
9. Drain valve
10. Air receiver pressure gauge
11. Regulated air outlet pressure gauge
12. Air outlet (regulated pressure)
13. Pressure regulator
14. On / off switch
15. Flywheel / fan
16. Pump unit
17. Air intake filter

SETTING UP THE COMPRESSOR

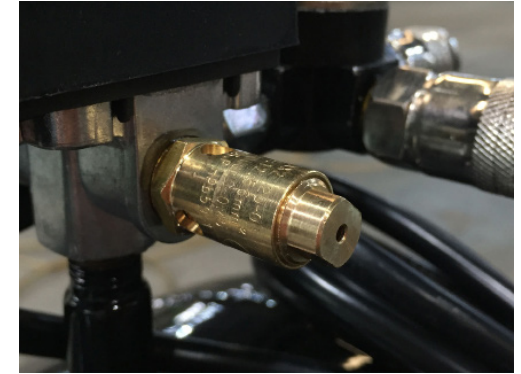


IMPORTANT! Before starting the machine remove all the travel plugs and attach the Air Filter and the Crank Case Breather Plug.



SETTING UP THE COMPRESSOR

The compressor is equipped with a safety valve. If the pump were to continue operating above the maximum pressure, the safety valve would open and eject air from the vessel. If the safety valve discharges air, please turn off the compressor and contact the helpline. The safety valve is located to the side of the pressure switch.



Securing the wheels to the frame

The wheels are secured to the lower frame on the underside of the air receiver. To fix the wheels to the frame, put the fixing bolt through each wheel and then through the hole in the frame. Secure by means of the washer and nut. The positioning of the wheel can be seen below. Once you've fixed the wheels then turn your attention to the front wheel. To attach this align all 4 holes in the plate with the wheel and secure by means of the bolts supplied. Tighten firmly.



SETTING UP THE COMPRESSOR

Fitting the handle

To fit the handles align them with the holes in the end of the pump and motor bracket and slide in. Ensure the handle has gone far enough into the holes. Secure the handle by tightening the bolts on either side indicated below.



WARNING! The handle is intended to assist you in manoeuvring the compressor on the wheels. It is not intended to be used to lift the compressor.

BEFORE OPERATION

Filling the sump with oil

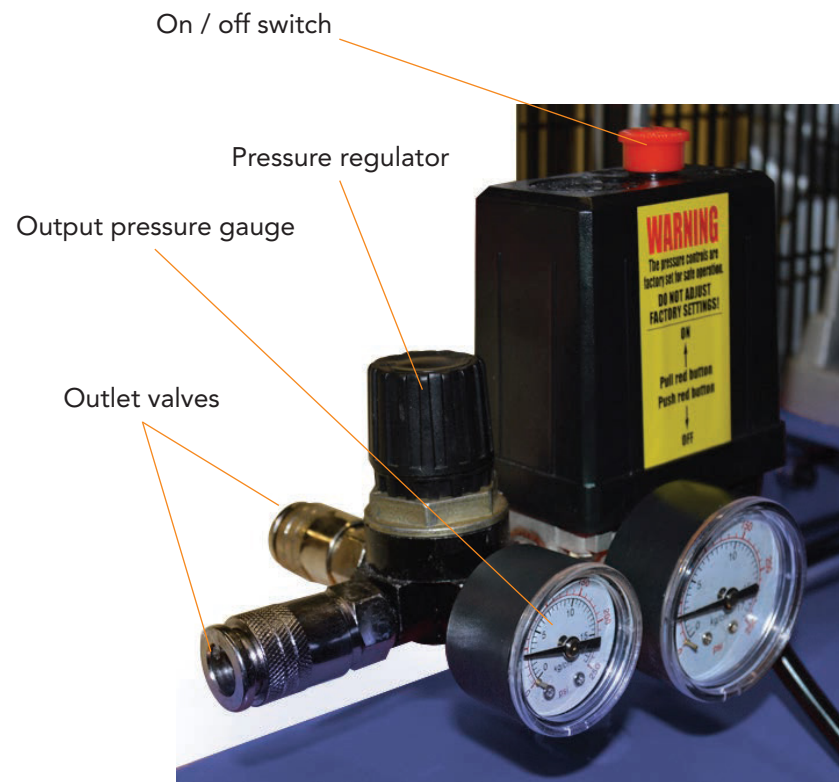
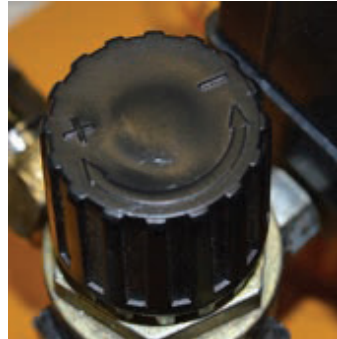
Pour approximately 0.5L of oil into the sump until the oil level reaches the red spot in the centre of the sight glass (see image below). Once the oil has reached the correct level re-insert the oil breather plug.



OPERATION

Air Pressure Regulator

To adjust the pressure turn the Pressure Regulator dial anti clockwise to decrease the pressure and turn the dial clockwise to increase pressure.



OPERATION

Starting the Air Compressor

Once the air compressor is connected to the mains supply use as follows:

- Pull up the button on the pressure switch this will 'click' up into position. The motor/pump will now start to run.
- Check that the motor/pump automatically stops when the pressure inside the air receiver reaches approximately (10BAR) (check gauge). Rotate the air regulator to the desired outlet pressure and plug in hose with chosen air tool connected to the other end. The air is now ready for use. You may need to finely adjust as the air tool is used.
- Check that the motor/ pump automatically starts, when the pressure falls by approximately 2BAR.

When the compressor is running correctly you will hear the following:

- When the air compressor starts from no pressure within the tank there is a whistle of 'leaking' air from the pressure switch for about 20-30 seconds.
- Whenever the motor stops there will be a quick sudden discharge of air. (This is the motor start and stop air unloading system being activated).

Shutting down the Air Compressor

Never stop the compressor by unplugging it. The pressure switch must always be used as this ensures that air is discharged from the head. This makes the starting easier for the motor and prevents motor damage.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	ACTION
Motor unable to run, running slow or getting hot	<ol style="list-style-type: none"> 1. Fault in line or insufficient voltage 2. Power wire too thin or long 3. Fault in pressure switch 4. Fault in motor 5. Sticking of main compressor 	<ol style="list-style-type: none"> 1. Check the line 2. Replace the wire 3. Repair or replace 4. Repair or replace 5. Check and repair
Sticking of main compressor	<ol style="list-style-type: none"> 1. Moving parts burnt due to insufficient oil 2. Moving parts damaged or stuck by a foreign body 	Check crankshaft, bearing, connecting rod, piston, piston ring, etc. and replace if necessary
Shaking or abnormal noise	<ol style="list-style-type: none"> 1. Connecting part loose 2. Foreign body in the main compressor 3. Piston knocking the valve seat 4. Moving parts seriously worn 	<ol style="list-style-type: none"> 1. Check and retighten 2. Check and clean away 3. Replace with thicker paper gasket 4. Repair or replace
Pressure insufficient or discharge capacity decreased	<ol style="list-style-type: none"> 1. Motor running too slow 2. Air filter choked up 3. Leakage of safety valve 4. Leakage of discharge pipe 5. Sealing gasket damaged 6. Valve plate damaged, stuck or carbon build up 7. Piston ring and cylinder worn or damaged 	<ol style="list-style-type: none"> 1. Check and remedy 2. Clean or replace the cartridge 3. Check and adjust 4. Check and repair 5. Check and replace 6. Replace and clean 7. Repair or replace
Excessive oil consumption	<ol style="list-style-type: none"> 1. Oil level too high 2. Breather pipe choked up 3. Piston ring and cylinder worn or damaged 	<ol style="list-style-type: none"> 1. Keep the level within set range 2. Check and clean 3. Repair or replace

MAINTENANCE

Changing the oil

Switch off the motor and remove the power plug from the socket outlet. Release any remaining air pressure and then unscrew the oil drain plug from the compressor pump and remove. Direct the oil into an appropriate container. If any oil still remains, tilt the compressor slightly. When all the old oil has been removed, screw the oil drain plug into place.

Cleaning

Clean the items with a soft brush or a wipe moistened with a suitable bio-degradable solvent. Do not use flammable liquids like petrol or alcohol, they are a risk and will damage the finish and plastic parts.

Cleaning/ changing the air filter (Monthly)

Please note: This compressor should not be used in a heavily dusty atmosphere. The warranty does not cover damage caused by a blocked air filter. The air filter must be cleaned or replaced monthly, or more frequently if the compressor is in regular use. The air filter can be accessed easily by unscrewing the air filter cover (wing nut) at the side of the pump.

ADJUSTING THE CUT OFF PRESSURE

If your compressor cuts out before 10 bar:

Your compressor has been tested during manufacture and the cut off pressure may be set at 6 bar or 8 bar, rather than 10 bar.

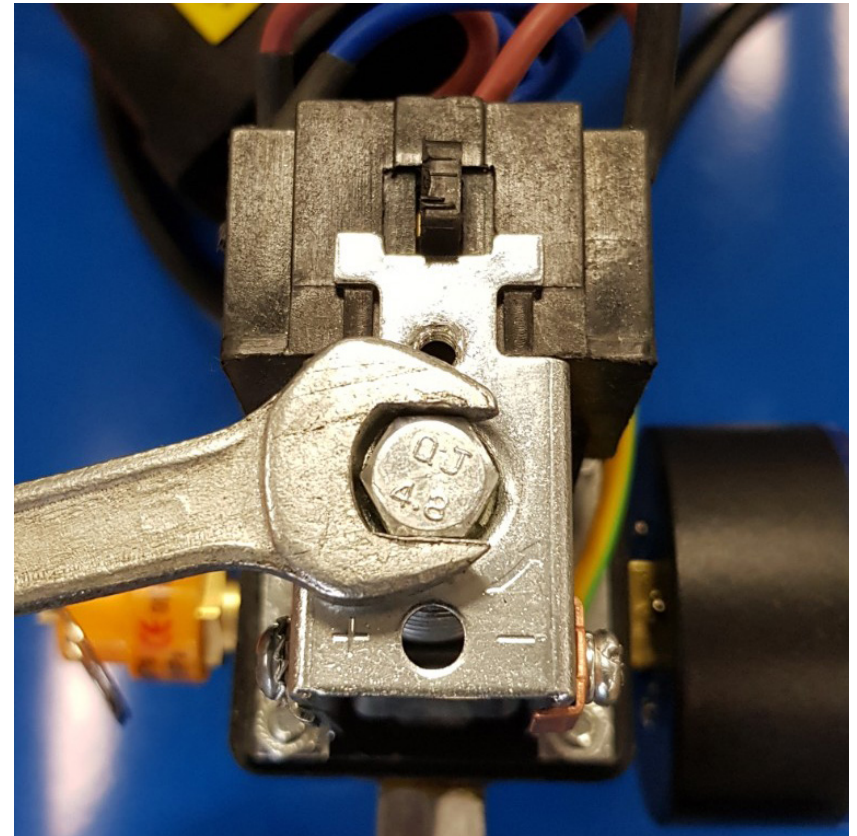
Most applications do not require 10 bar air pressure so we recommend leaving the cut off pressure at the factory setting unless explicitly required.

If you wish to increase the tank pressure to 10 bar first open the switch box by unscrewing the single screw:

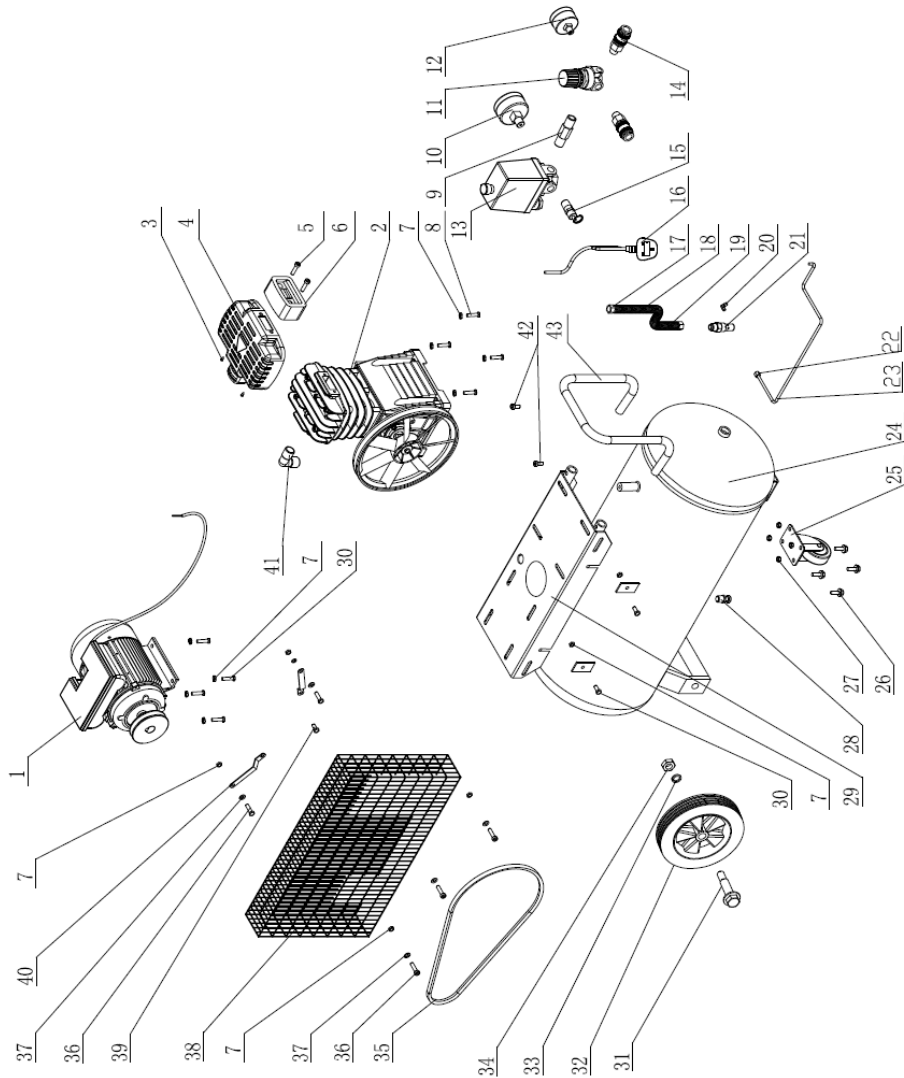


ADJUSTING THE CUT OFF PRESSURE

Then turn the 10mm nut clockwise to increase the pressure and counter-clockwise to decrease the pressure. Make a half turn on the nut in either direction, then wait for the tank pressure to equalise. Make further half turns if required.



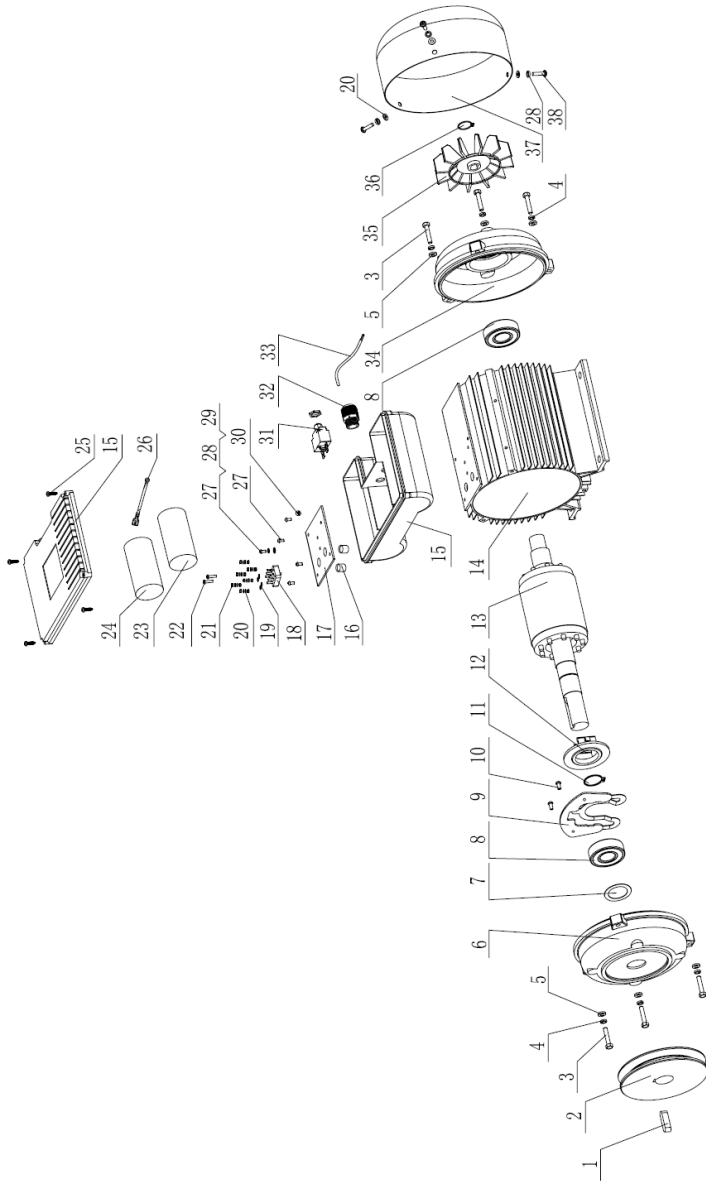
PARTS DIAGRAM



PARTS LIST

No.	Description	Qty	Part No	No.	Description	Qty	Part No
1	Motor	1	902689	23	Pipe	1	902711
2	Pump	1	902690	24	Tank	1	902712
3	Screw	2	902691	25	Wheel	1	902713
4	Cylinder Head Cover	1	902692	26	Screw	4	902714
5	Screw	2	902693	27	Nut	4	902715
6	Air Filter	1	902694	28	Drain Valve	1	902716
7	Nut	16	902695	29	Seat	1	902717
8	Screw	4	902696	30	Screw	8	902718
9	Connector	1	902697	31	Bolt	2	902719
10	Pressure Gauge	1	902698	32	Wheel	2	902720
11	Pressure Regulator	1	902699	33	Washer	2	902721
12	Pressure Gauge	1	902700	34	Nut	2	902722
13	Pressure Switch	1	902701	35	Belt	1	902723
14	Quick Coupler	2	902702	36	Screw	5	902724
15	Safety Valve	1	902703	37	Washer	5	902725
16	Plug	1	902704	38	Belt Guard	1	902726
17	Nut	2	902705	39	Screw	1	902727
18	Pipe	1	902706	40	Belt Guard Support	2	902728
19	Cooling Fin	1	902707	41	Elbow	1	902729
20	Elbow	1	902708	42	Screw	2	902730
21	Check Valve	1	902709	43	Handle	1	902731
22	Nut	1	902710				

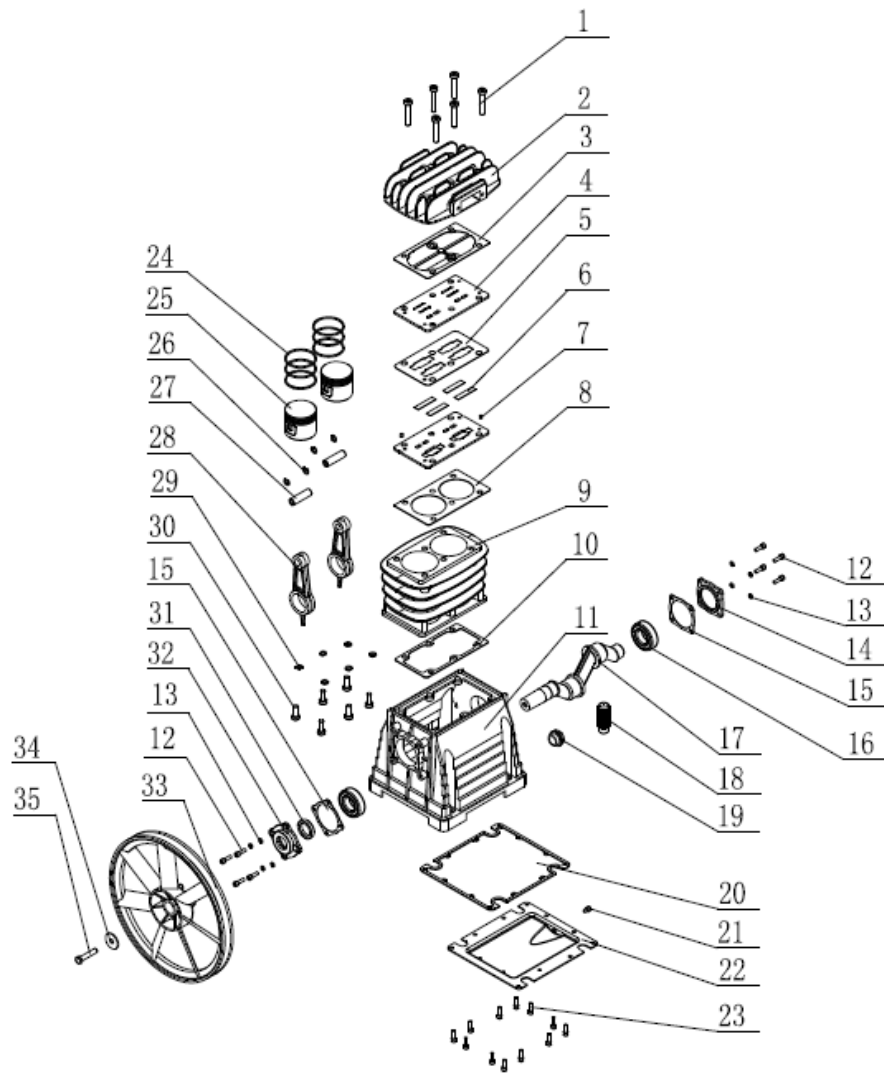
PARTS DIAGRAM



PARTS LIST

NO.	Description	QTY	Part No	NO.	Description	QTY	Part No
1	Key	1	902732	20	Gasket	25	902751
2	Motor Wheel	1	902733	21	Nut	11	902752
3	Screw	6	902734	22	Screw	2	902753
4	Washer	6	902735	23	Capacitor	1	902754
5	Washer	6	902736	24	Capacitor	1	902755
6	Front Cover	1	902737	25	Screw	4	902756
7	Gasket	1	902738	26	Wire	1	902757
8	Bearing	2	902739	27	Screw	5	902758
9	Gasket	1	902740	28	Washer	4	902759
10	Screw	2	902741	29	Gasket	1	902760
11	Gasket	1	902742	30	Gasket	1	902761
12	Centrifugal Switch	1	902743	31	Protector	1	902762
13	Rotor	1	902744	32	Unseparated Device	1	902763
14	Stator	1	902745	33	Wire	1	902764
15	Capacitor Cover	1	902746	34	Rear Cover	1	902765
16	Support	2	902747	35	Fan	1	902766
17	Gasket	1	902748	36	Gasket	1	902767
18	Wire Support	1	902749	37	Motor Cover	1	902768
19	Gasket	2	902750	38	Screw	3	902769

PARTS DIAGRAM



PARTS LIST

NO.	Description	QTY	Part No	NO.	Description	QTY	Part No
1	Cylinder Head Bolt	6	902770	19	Oil Gauge	1	902788
2	Cylinder Head	1	902771	20	Seal Ring	1	902789
3	Cylinder Head Gasket	1	902772	21	Screw	1	902790
4	Valve Plate	2	902773	22	Bottom Board	1	902791
5	Gasket	1	902774	23	Screw	12	902792
6	Valve	4	902775	24	Piston Ring	2	902793
7	Pin	2	902776	25	Piston	2	902794
8	Valve Plate gasket	1	902777	26	Circlip	4	902795
9	Cylinder	1	902778	27	Piston Pin	2	902796
10	Cylinder Gasket	1	902779	28	Connecting Rod	2	902797
11	Crankcase	1	902780	29	Gasket	8	902798
12	Screw	8	902781	30	Cylinder Screw	8	902799
13	Gasket	8	902782	31	Oil Seal	1	902800
14	Rear Cover	1	902783	32	Front Cover	1	902801
15	Gasket	2	902784	33	Belt Wheel	1	902802
16	Bearing	2	902785	34	Washer	1	902803
17	Crankshaft	1	902786	35	Screw	1	902804
18	Oil Breath	1	902787				



SGS Engineering (UK) Ltd
West Side Park
Raynesway
Derby, DE21 7AZ

EC Declaration of Conformity

This is an important document and should be retained

MANUFACTURER'S NAME: SGS Engineering (UK) Ltd

TYPE OF EQUIPMENT: AIR COMPRESSOR

PART NUMBER: SC90B & SC150B

APPLICATION OF EC COUNCIL DIRECTIVES / STANDARD:

2006/42/EC - Machinery

2004/108/EC - EMC

2006/95/EC - LVD

87/404/EEC - The simple pressure vessel regulations

97/23/EC - Pressure equipment directive

I, the undersigned, hereby declare that the equipment specified above conforms to the above European Communities Directive(s) and Standard(s).

PLACE: Derby, UK

DATE: 24th MAY 2018

A handwritten signature in black ink, appearing to read 'Robert Wyatt', written over a horizontal line.

(Signature)

Robert Wyatt

Company Secretary