

LOW NOISE AIR COMPRESSOR MODEL NO: SHHHAIR MAX 50/350

PART NO: 2242050

OPERATION & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

DL1123

INTRODUCTION

Thank you for purchasing this Air Compressor.

Before attempting to operate the machine, it is essential that you read this manual thoroughly and carefully follow all 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 product 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 to us without prior permission. This guarantee does not effect your statutory rights.

ENVIRONMENTAL RECYCLING POLICY



By purchasing this product, the customer is taking on the obligation to comply with current WEEE regulations.

This means that this product must not be disposed of with general household waste. It must be disposed of according to the laws

governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

This product contains valuable raw materials. Metal products should be taken to your local civic amenity site for recycling of metal products.

GENERAL SAFETY WARNINGS



WARNING: WHEN USING ELECTRICAL TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK AND PERSONAL INJURY

WARNING: READ ALL THESE INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE THIS PRODUCT AND KEEP THESE INSTRUCTIONS IN A SAFE PLACE.

WORK AREA

- 1. **Keep the work area clean and well lit.** Floors should always be kept clear. Cluttered or dark areas invite accidents.
- 2. Keep children and bystanders away while operating a power tool. Distractions can cause loss of control.
- 3. The compressor should only be used in areas with adequate ventilation and should not be exposed to heat or used near flammable substances

PERSONAL SAFETY

- 1. **ALWAYS** stay alert, watch what you are doing and use common sense when operating the compressor. **DO NOT** use the compressor while you are tired or under the influence of medication, drugs or alcohol. A moment of inattention can result in personal injury.
- 2. **ALWAYS** use eye protection when operating compressed air equipment, and ensure that others in the work area are protected from flying particles from the front and from the side.
- 3. ALWAYS protect yourself against electric shock. NEVER operate the compressor in wet or damp locations.
- 4. **NEVER** over-reach. Keep your proper footing and balance at all times to enable better control of the compressor in unexpected situations.
- 5. **NEVER** attempt any complex repairs yourself. If you have a technical problem contact your local dealer.
- 6. **ALWAYS** store the compressor out of reach of children.
- 7. **ALWAYS** protect your hearing. Ear protection should be worn when operating this compressor and it's associated power tools.
- 8. **NEVER** 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.
- 9. **NEVER** insert your fingers or other objects inside the motor housing. **NEVER** operate the compressor without the cover in place.

GENERAL MACHINE USE AND CARE

- 1. Prior to use, all operators should become familiar with the instructions in this booklet especially the ON/OFF switch for emergency stopping.
- 2. **ALWAYS** maintain the compressor with care and keep it clean for best / safest performance.
- 3. **NEVER** use this compressor if any part is damaged. Have it inspected and repaired by your dealer.
- 4. **NEVER** attempt to modify the air compressor, tank, fittings or attachments in any way. Doing so will invalidate the guarantee and could result in personal injury.
- 5. **NEVER** abuse the power cable. **NEVER** pull on the cable when removing the plug from the socket, or lift the compressor by the power cable.
- 6. Try to **AVOID** using extension leads. Where possible use a longer airline hose instead.
- 7. If you have to use an extension lead, **ONLY** use one that is of an appropriate power rating and suitable for the work environment. Extension leads must have an earth connection. Inspect the extension lead regularly and replace if damaged.
- 8. ONLY USE RECOMMENDED PARTS: To avoid the risk of bursting, only hoses with a rated pressure of 10 bar, or more should be used. **NEVER** attempt to repair damaged hoses.
- 9. **NEVER** abuse the compressor by standing on it.

AIRLINE HOSES

- 1. **ALWAYS** ensure that equipment or power tools used in conjunction with the compressor have a safe working pressure exceeding that of the machine.
- 2. **ALWAYS** keep the air hose away from any attached power tools and ensure that the operator is not restricted by the length of the hose.
- 3. **ALWAYS** take care when a long air hose is required in the work area as it presents a trip hazard. Coil the hose away as soon as the job is finished.
- 4. **ALWAYS** avoid kinking or trapping the air hose. **ALWAYS** replace faulty hoses and **NEVER** attempt a repair if a leak is detected.
- 5. **NEVER** abuse hoses or connectors. **NEVER** carry an air tool by the hose, or yank it to disconnect from the air supply. Keep hoses away from heat, oil and sharp edges. Check hoses for leaks or worn condition before use and ensure that all connections are secure.
- 6. **ALWAYS** ensure that the air supply is turned off at the machine outlet and any air pressure vented from within the compressor and any attached equipment when disconnecting air hoses or other equipment.

AIR COMPRESSOR SAFETY INSTRUCTIONS

- 1. **ONLY USE WITHIN THE RECOMMENDED OPERATING TEMPERATURE RANGE:** This compressor should only be used in an ambient temperature of between 0°C and +35°C (never below freezing temperatures).
- 2. **NEVER USE AN AIR COMPRESSOR WHICH APPEARS DEFECTIVE OR IS OPERATING ABNORMALLY:** If the compressor operates unusually or makes strange noises, switch off immediately and purge the air reservoir. Arrange repairs with your nearest dealer.
- 3. **BREATHING QUALITY AIR:** This compressor should not be used to supply breathing quality air.
- 4. **SAFETY VALVE: NEVER** remove or attempt to adjust the safety valve. The maximum pressure is factory set. Keep the safety valve free from paint and other accumulations.
- 5. **AVOID UNINTENTIONAL STARTING: DO NOT** move the compressor when it is connected to the mains power supply.
- 6. **BEFORE EACH USE CHECK THE COMPRESSOR AND HOSE FOR DAMAGED PARTS: NEVER** use the compressor if it has been damaged in any way. Have the compressor repaired by a qualified service engineer. **DO NOT** use the compressor if the On/Off switch does not operate correctly.
- KEEP THE MOTOR AIR VENTS CLEAR: Keep the motor vents clear and free from dust. Wipe regularly to maintain an adequate supply of clean air. AVOID using in dusty conditions.
- 8. **OPERATE THE COMPRESSOR AT THE CORRECT VOLTAGE:** Make sure that the mains supply voltage is the same as the voltage shown on the label.
- 9. **ALWAYS** adjust the pressure regulator to the recommended setting for the particular spray gun or air tool being used.
- 10. When using the compressor for painting:
- DO NOT work in enclosed areas or near naked flames.
- Ensure that the area in which you are working has good ventilation.
- Protect your nose and mouth with a suitable face mask.
- **ALWAYS** check the safety data sheets for substances being sprayed & ensure manufacturer's instructions are followed.
- 11. DO NOT USE THIS COMPRESSOR TO INFLATE SMALL, LOW-PRESSURE OBJECTS: Items such as children's toys or footballs, these can explode if over-inflated.
- 12. NEVER STOP THE COMPRESSOR BY REMOVING THE PLUG OR SWITCHING OFF AT THE MAINS SUPPLY: ALWAYS use the On/Off switch on the compressor.

ELECTRICAL CONNECTIONS

WARNING! READ THESE ELECTRICAL SAFETY INSTRUCTIONS THOROUGHLY BEFORE CONNECTING THE PRODUCT TO THE MAINS SUPPLY.

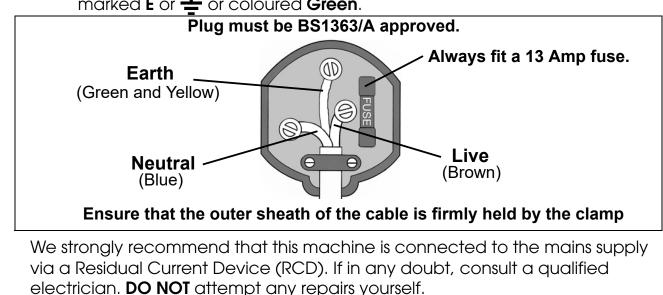
Before switching the product on, make sure that the voltage of your electricity supply is the same as that indicated on the rating plate. This product is designed to operate on 230V AC 50Hz. Connecting it to any other power source may cause damage.

This product may be fitted with a non-rewireable plug. If it is necessary to change the fuse in the plug, the fuse cover must be refitted. If the fuse cover becomes lost or damaged, the plug must not be used until a suitable replacement is obtained.

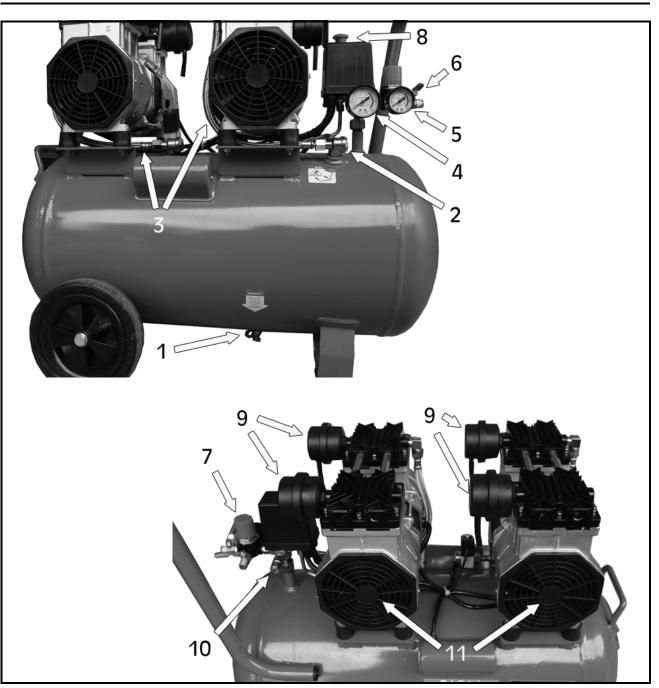
If the plug has to be changed because it is not suitable for your socket, or due to damage, it should be cut off and a replacement fitted, following the wiring instructions shown below. The old plug must be disposed of safely, as insertion into a mains socket could cause an electrical hazard.

If the colours of the wires in the power cable of this product do not correspond with the markings on the terminals of your plug, proceed as follows.

- The **Blue** wire must be connected to the terminal marked **N** or coloured **Black**.
- The **Brown** wire must be connected to the terminal marked **L** or coloured **Red**.



OVERVIEW



	DESCRIPTION		DESCRIPTION
1	Drain Valve	7	Regulator
2	One Way Check Valve	8	On/Off Pressure Switch
3	Discharge Pipe	9	Air Filters
4	Tank Pressure Gauge	10	Pressure Safety Valve
5	Outlet Pressure Gauge	11	Pump
6	2 x 1/4″ BSP Airline Outlet Fixing Point With Tap	12	Air Tank

ON/OFF PRESSURE SWITCH

Switch on - Auto/Off. The compressor will automatically switch off when the tank pressure reaches the maximum preset pressure (0.8Mpa, 8 Bar, 116psi) and will run automatically when the tank pressure reaches the minimum preset pressure (0.6Mpa, 6 Bar, 87psi). In the `OFF' position, the compressor will not operate. This switch should be in the `OFF' position when connecting or disconnecting the power cord from the electrical outlet or when changing air tools.

REGULATOR

- 1. The regulator adjusts the air pressure to fit an air operated tool, spray gun of sandblaster.
- 2. To adjust the outlet air pressure, turn the regulator clockwise or counterclockwise to suit the type of tool you are using.

SAFETY VALVE

This valve will automatically release compressed air when the pressure in the tank exceeds the allowed pressure.

DISCHARGE PIPE

This pipe connects the pump head to the check valve. **CAUTION**: It is hot when the compressor is running.

CHECK VALVE

The check value is a one way value allowing compressed air to enter the tank, but prevents compressed air in the tank back into the pump.

DRAIN VALVE

This value located at the bottom of the tank is used to exhaust water from the tank. Make sure the pressure gauge of the tank is below 1 Bar to open it. Open the drain value to exhaust water in the tank, closing it tightly. **NOTE: This action should be done at least every week.**

PRESSURE GAUGES

There are 2 pressure gauges on this type of compressor, one shows the pressure in the tank and the other one shows the outlets pressure after the regulator has been set.

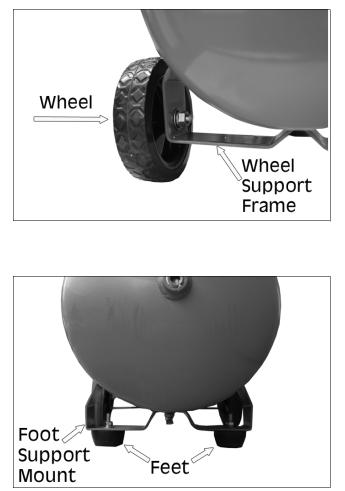
PREPARING FOR USE

CONNECTING THE WHEELS & RUBBER FOOT

- 1. Unscrew the nut and two washers from the wheel axle.
- 2. Pass the wheel axle through the axle hole in the wheel support frame as shown, with a washer either side of the hole.
- 3. Replace and tighten the nut onto the axle.

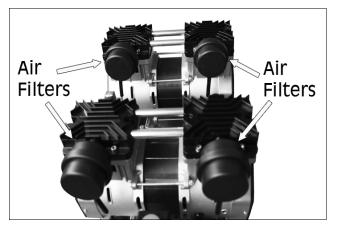
NOTE: Make sure that the nut is not too tight, so the wheel has free movement.

- 1. Unscrew the nut and washers from the rubber foot.
- 2. Place the rubber foot bolt through the foot support mount on the underside of the air tank, as shown.
- 3. Replace the washer and nut onto the bolt and tighten.



FITTING THE AIR FILTERS

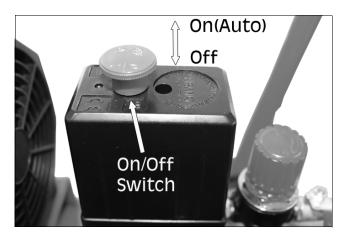
- 1. Remove the transit plugs from the air filter inlets.
- 2. Screw the air filters into the inlets, as shown.



OPERATION

Before connecting your compressor to the mains supply, check the following:-

- 1. Firstly, ensure the compressor is on level ground. **DO NOT** allow it to run if it is standing on an incline.
- 2. Check that the mains voltage corresponds with that shown on the data label on the side of the compressor and the specification page (p18) of this manual.
- 3. The **ON/OFF** switch is in the OFF position.

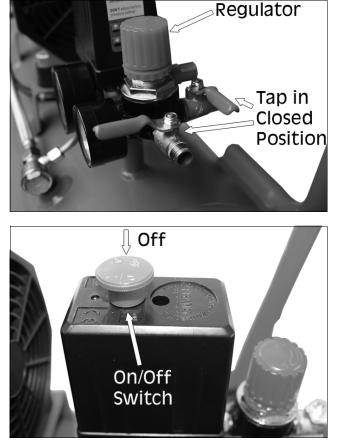


STARTING THE COMPRESSOR

CAUTION: DO NOT ATTACH ANY AIR TOOLS TO THE OUTLET UNTIL THE UNIT HAS BEEN CHECKED AND THE STARTING PROCEDURES HAVE BEEN COMPLETED.

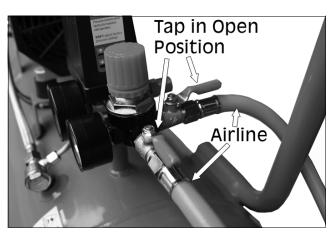
 Turn the regulator fully clockwise

 (+) to open the airflow, making sure the flow tap is in the closed position.



2. Push the ON/OFF switch to the `OFF' position and plug in the power cord.

- 3. Pull the ON/OFF switch to the On(Auto) position and let the pump run.
- 4. Turn the regulator fully counterclockwise. The compressor will build to maximum preset pressure and then shut off.
- 5. Turn the regulator clockwise to bleed off the air. The compressor will restart at a preset pressure (about 6 bar).
- 6. Turn the regulator counterclockwise to shut off the air and push the ON/ OFF switch to the `OFF' position.
- Attach the airline and tool to the airline outlet and turn the flow tap to the open position and pull the ON/OFF switch to the ON/AUTO position.
 - **NOTE:** When finished with the compressor, **ALWAYS** release any unused compressed air in the system.



MOISTURE IN THE COMPRESSED AIR

Moisture in the air will change to water when air is compressed or the temperature drops. When humidity is high or when the compressor is in continuous use for a long time, water will collect in the tank. If you use a paint spray or sandblast gun, moisture will be carried from the tank through the airline and mix with the spray material. This condensation will cause water spots in a paint job, especially when spraying other than water based paints. If sandblasting, it will cause the sand to clog the gun rendering it ineffective. To reduce these effects, a dry filter in the airline (see page 23), located as near to the gun as possible will help eliminate this moisture.

SAFETY VALVE

The safety valve should be checked under pressure occasionally by unscrewing the knurled head of the valve and pulling it out. If there is air leakage after releasing the valve head or the valve is stuck and can't be activated or closed, it **MUST** be replaced before using the compressor.

NOTE: ALWAYS remember to screw the valve head back in place once tested.



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TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	REMEDY
Compressor does not start or restart.	1.No electrical power, Wire connection loose.	1.Make sure the machine is connected to power. Check wire connections.
	2.Fuse blown.	2.Change fuse.
	3.Circuit break.	3.Reset the circuit breaker, check for low voltage conditions.
	4.Thermal overload switch open.	4.Turn air compressor off, wait until the motor is cool and the overload switch is closed, then try and restart.
	5.Pressure switch is ineffective.	5.Replace pressure switch.
Fuse blown/circuit breaker trips repeatedly.	1.Incorrect fuse size, circuit overloaded.	1.Check for correct fuse (13A), or use a time delay fuse. Disconnect other electrical appliances from the circuit or operate the compressor on its own branch circuit.
	2.Defective check valve or unloaded.	2.Repair or replace valve. NEVER disassemble the check valve under pressure, release tank pressure first.

PROBLEM	PROBABLE CAUSE	REMEDY
Motor stalls or runs slowly.	1.Voltage is too low.	1.Check for low voltage conditions.
	2.Low power due to poor connection.	2.Check connections, eliminate extension cord if used, check circuit with voltmeter.
	3.Motor short circuit.	3.Replace motor. Return to CLARKE dealer or contact CLARKE Service Department.
	4.Check valve is blocked.	4.Disassemble check valve to check if it is blocked and replace is necessary. NEVER disassemble the check valve under pressure, release tank pressure first.
Thermal overload protector cuts out repeatedly.	1.Low voltage.	1.Eliminate extension cord if used, check with voltmeter.
	2.Clogged air filter.	2.Clean filter (see maintenance section).
	3.Lack of proper ventilation/room temperature too high.	3.Move compressor to well ventilated area.
	4.Check valve malfunction.	4.Replace valve.Return to CLARKE dealer or contact CLARKE Service Department.
	5.Compressor valves failed.	5.Replace valve assembly. Return to CLARKE dealer or contact CLARKE Service Department.

PROBLEM	PROBABLE CAUSE	REMEDY
Knocks, rattles, excessive vibration.	1.Loose bolts, tank is not on a horizontal plain.	1.Tighten bolts, move tank to a horizontal plain.
	2.Defective bearing on eccentric or motor shaft.	2.Replace bearing and/or motor shaft. Return to CLARKE dealer or contact CLARKE Service Department.
	3.Cylinder or piston ring is scored.	3.Repair or replace as necessary. Return to CLARKE dealer or contact CLARKE Service Department.
Tank pressure drops when	1.Loose drain cock.	1.Tighten drain cock.
compressor shuts off.	2.Check valve leaking.	2.Disassemble check valve assembly, clean or replace.
	3.Loose connections at pressure switch or regulator.	3.Check all connections with soap and water solution and tighten.
Excessive moisture in discharge air.	1.Excessive water in tank.	1.Drain tank after every use.
	2.High humidity.	2.Move to area of less humidity, drain air tank more often in humid weather and use air line filter. NOTE: Water condensation is not caused by compressor malfunction.

PROBLEM	PROBABLE CAUSE	REMEDY
Compressor runs continuously and air output is lower than	1.Excessive air usage, compressor too small.	1.Decrease usage or purchase unit with higher air delivery.
normal/low discharge pressure.	2.Clogged intake filter.	2.Clean or replace.
	3.Air leaks in piping (on machine or in outside system).	3.Replace leaking components or tighten as necessary. Return to CLARKE dealer or contact CLARKE Service Department.
	4.Broken inlet valve.	4.Replace compressor valves. Return to CLARKE dealer or contact CLARKE Service Department.
	5.Piston ring worn.	5.Replace piston and cylinder. Return to CLARKE dealer or contact CLARKE Service Department.
Compressor runs continuously and safety valve opens as pressure rises.	1.Defective pressure switch.	1.Replace switch. Return to CLARKE dealer or contact CLARKE Service Department.
	2.Defective safety valve.	2.Replace safety valve with genuine replacement part. Return to CLARKE dealer or contact CLARKE Service Department.
Excessive starting and stopping (auto start)	1.Excessive condensation in tank.	1.Drain tank more often.

PROBLEM	PROBABLE CAUSE	REMEDY
Air leaking from release valve on pressure switch.	1.Check valve stuck in an open position.	1.Remove and replace check valve. NEVER disassemble the check valve under pressure, release tank pressure first.

MAINTENANCE

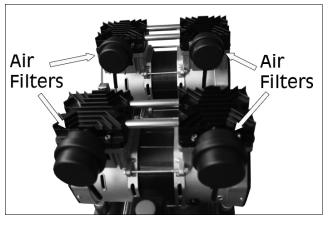
	Daily	Weekly	Monthly	3 Monthly
Drain the condensation from the air receiver via the drain valve	Х			
Check for air leaks	Х			
Remove air filter element and clean or replace as required		Х		
Inspect non-return valve (clean or replace as required). CAUTION: Ensure that the tank is empty of compressed air for this operation			Х	
Manually test the safety valve by pulling the valve head out			Х	
Tighten cylinder head bolts				Х
Clean and check valve assembly, replace gaskets/valves if worn or damaged				Х

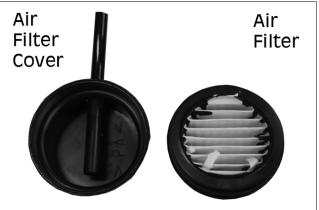
REPLACING THE AIR FILTERS

The compressor must be completely depressurised before carrying out this procedure.

1. Unscrew the air filter from the pump head assembly.

- 2. Unscrew the air filter cover and clean or replace the air filter.
- 3. Screw the air filter cover back together and screw back onto the pump head assembly.





STORAGE

- When not in use, store the hose and compressor in a cool dry place.
- Drain the tank of all compressed air and moisture/condensation.
- Disconnect the hose and hang on top of the compressor to avoid damage.

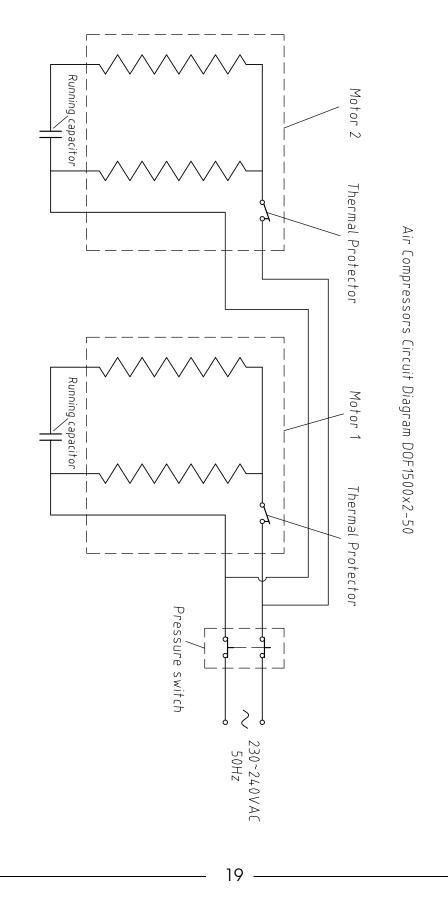
SPECIFICATION

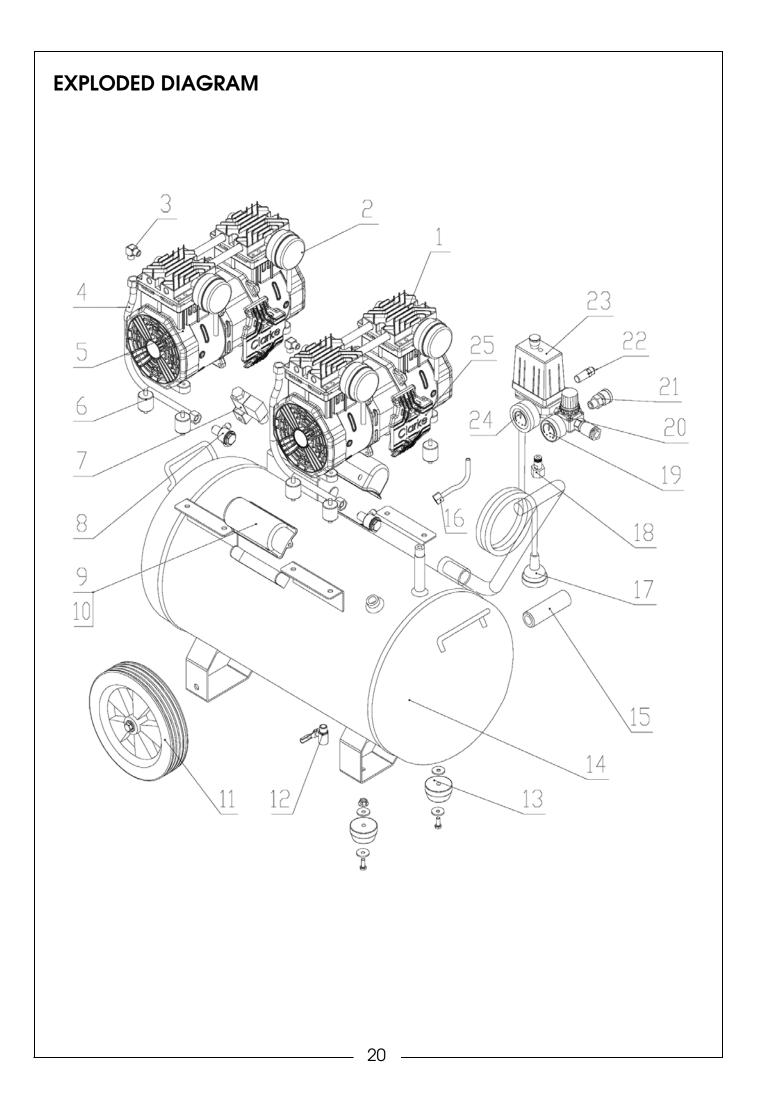
Product	
Model	ShhhAir Max 50/350
Operating Temperature Range	0°C - 35°C
IP Rating	IP20
Overload Protection Device	Automatic Thermal Protector
Protection Class	Class I
Duty Cycle	S3 50% 10mins Cycle Time
Dimensions Fully Assembled (D x W x H)	700 x 390 x 680 mm
Weight	44 kg
Motor	
Туре	2 x Induction - 3.5 HP
Power Supply	230 V/ 50 Hz
Rated Input Wattage	2500W
Rated Input Current	11A
RPM @ 230V	2850 rpm
Compressor Pump & Tank	
Receiver Tank Capacity	50L
Tank Max. Design Pressure	11 Bar/160psi
Outlet Size	2 x 1/4" BSP
Bore	63.7mm
Stroke	13mm
Displacement	480 l/min
Free Air @ 7 Bar/101psi	155 I/min
Max. Operating Pressure	8 Bar/116psi
Min. Operating Pressure	6 Bar/87psi
Environmental	
Sound Pressure Level	66 dBA
Sound Power Level	86 dBA
Uncertainty Factor	2.5 dBA

Please note that the details and specifications contained herein are correct at the time of going to print.

COMPONENT DIAGRAMS & PARTS LIST

PUMP ELECTRIC DIAGRAM



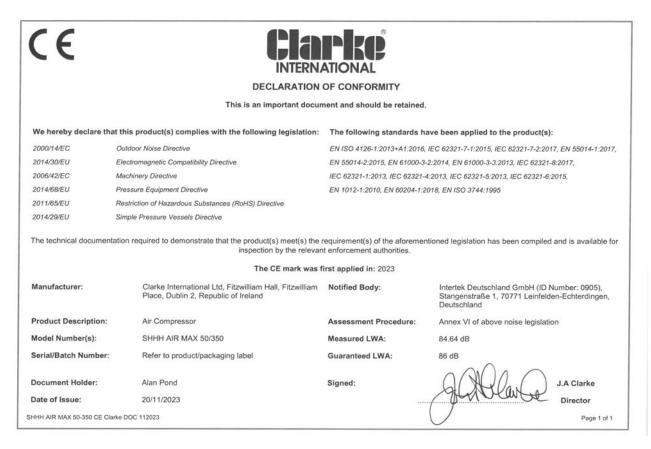


PARTS LIST

NO	DESCRIPTION
1	2 x Pump Assembly
2	Air Filter x 4
3	Elbow Connector
4	Discharge Tube
5	Pump 2
6	Pump Pads x 8
7	Solenoid Valve
8	One Way Check Valve x 2
9	Capacitor Cover x 2
10	Capacitor 28uF x 2
11	7" Wheel x 2
12	Drain Valve
13	Rubber Pad x 2
14	Air Tank
15	Handle Grip
16	Release Tube
17	Power Cord
18	PS Connector
19	Gauge D50
20	Regulator 4 - 1/4
21	Outlet x 2 - 1/4" BSP
22	Pressure Safety Valve
23	Pressure Switch
24	Gauge D50
25	Motor Side Cover

DECLARATION OF CONFORMITY

UK CA				
	DECLARATION	OF CONFORMITY		
	This is an important docu	ment and should be retained.		
We hereby declare that th	is product(s) complies with the following legislation:	The following standards have	ave been applied to the product(s):	
Noise Emission in the Environ	ment by Equipment for use Outdoors Regulations 2001	EN ISO 4126-1:2013+A1:2016,	IEC 62321-7-1:2015, IEC 62321-7-2:2017, EN 55014-1:2017	
The Electromagnetic Compati	bility Regulations 2016	EN 55014-2:2015, EN 61000-3-	-2:2014, EN 61000-3-3:2013, IEC 62321-8:2017,	
The Supply of Machinery (Saf	ety) Regulations 2008	IEC 62321-1:2013, IEC 62321-4:2013, IEC 62321-5:2013, IEC 62321-6:2015,		
The Pressure Equipment (Safe	aty) Regulations 2016	EN 1012-1:2010, EN 60204-1:2018, EN ISO 3744:1995		
The Restriction of the Use of 0 Equipment Regulations 2012	Certain Hazardous Substances in Electrical and Electronic			
The Simple Pressure Vessels	(Safety) Regulations 2016			
The technical documentatio	n required to demonstrate that the product(s) meet(s) the inspection by the relevant	requirement(s) of the aforemer nt enforcement authorities.	tioned legislation has been compiled and is available fo	
	The UKCA mark was	s first applied in: 2023		
Manufacturer:	Clarke International Ltd, Hemnall Street, Epping, Essex, CM16 4LG, United Kingdom	Notified Body:	Intertek Deutschland GmbH (ID Number: 0905), Stangenstraße 1, 70771 Leinfelden-Echterdingen, Deutschland	
Product Description:	Air Compressor	Assessment Procedure:	Annex VI of above noise legislation	
Model Number(s):	SHHH AIR MAX 50/350	Measured LWA:	84.64 dB	
Serial/Batch Number:	Refer to product/packaging label	Guaranteed LWA:	86 dB	
Document Holder:	Alan Pond	Signed:	J.A Clarke	



OTHER CLARKE AIR PRODUCTS

1/4″ Mini Air Filter - CAT152	5 Piece Air Tool Kit - KIT1100	Sandblast Kit & Pick Up Hose - SB4
•Max. Flow Rate: 6.2 Bar	 Includes: Spray Gun, Wash Gun, Tyre 	 Includes: 3m Suction Hose
 Max. Supply Pressure: 10 Bar 	Inflator, Blow Gun & 5m Recoil Hose	• 80 - 100 PSI Working Pressure
•Part No. 3120166	•Part No. 3110157	• Part No. 5091103
Retractable Air Hose Reel - CAR15MC	3 Piece Air Brush Kit - CAB	Aluminium Oxide Abrasive Powder
		CEDERCESSION CE
 15m Rubber Air Hose Supplied With Wall/ Ceiling Mounting Bracket 	 Includes: 2 x Glass Jars, 1 x Metal Jar, 1 x Lightweight Air Hose With 1/4" Adaptor Part No. 3110320 	•60 - 80 Grit •20Kg •Part No. 3052110
•Part No. 3126100		



0208 988 7400

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Servicing & Technical Enquiries Service@clarkeinternational.com

SALES: UK 01992 565333 or Export 00 44 (0)1992 565335