

150L ENGINE DRIVEN AIR COMPRESSOR

MODEL NO: XP15

PART NO: 2092500

OPERATION & MAINTENANCE INSTRUCTIONS

 ϵ

ORIGINAL INSTRUCTIONS

LS1019 - ISS 2

INTRODUCTION

Thank you for purchasing this CLARKE compressor which is designed to supply compressed air to air powered tools for a wide range of applications such as spraying, sanding, drilling, and cutting.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safe operation of the compressor.

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required 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.

RESIDUAL RISK

Although this manual contains extensive safety warnings and information on the safe operation of your compressor, every tool does have certain residual risks which cannot be completely excluded with warnings or safety devices. This compressor must therefore always be operated with caution.

NOISE LEVELS

This machine produces noise levels in excess of 70dB(A). Persons working in the vicinity of the machine must be provided with suitable ear protection.

SPECIFICATIONS

Part Number	2092500
Engine Type	Honda GP200H
Pump Type	NH3AP
Air Receiver Size	150
Maximum Outpur Pressure	100 psi
Air Displacement CFM	15
Outlet Connections	1/2"
Dimensions (mm LXWXH	1330 x 420 x 850
Weight (kg)	88

NOTE: Specifications are correct at the time of going to print. In the interests of safety or improvement in design, Clarke International reserves the right to change specifications at any time.



WARNING: DO NOT ATTEMPT TO ALTER ENGINE SPEED SETTINGS, DOING SO WILL INVALIDATE YOUR GUARANTEE

FOR YOUR SAFETY



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:

GENERAL PRECAUTIONS

ALWAYS

- Ensure that all individuals using the compressor have read and fully understand the Operating Instructions supplied and are suitably trained
- Stop the engine and ensure the pressure is expelled from the air receiver before carrying out any maintenance.
- Ensure that there is adequate ventilation when spraying flammable materials e.g. cellulose paint, and keep clear of any possible source of ignition.
- 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. Ear defenders
 will prevent hearing damage caused by load noise.
- Consult paint manufacturers instructions for safety and usage, before spraying
- Ensure that the air supply is turned off at the machine outlet and all
 pressurised air from the machine and other equipment attached to it, is
 expelled BEFORE disconnecting air hoses or other equipment.
- Make sure that children and animals are kept well away from the compressor and any equipment attached to it.
- Ensure that any equipment or tool used in conjunction with your compressor, has a safety working pressure exceeding that of the machine.

DO NOT

 Direct a jet of air at people or animals, and NEVER discharge compressed air against the skin. Compressed air CAN BE dangerous!

- Leave pressure in the receiver overnight, or when transporting.
- Adjust, or tamper with the safety valves. The maximum pressure is factory set, and clearly marked on the machine.
- 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.
- Touch the machine until it has cooled down...some of the metal parts can become quite hot during operation.
- Operate your compressor with any guards removed.

FIRE PREVENTION

ALWAYS

- · Switch the engine OFF when refuelling.
- Refuel away from any source of heat.
- Refuel in a well ventilated area.

DO NOT

- Overfill the tank, fill to the level specified.
- Smoke whilst refuelling and avoid smoking or using a naked flame near the compressor.
- Start the engine if there is spilled fuel. Any spillage must be wiped clean
 and the compressor allowed to dry before attempting to start the
 engine.

EXHAUST GAS PRECAUTIONS

ALWAYS

- Make sure that there is adequate ventilation when using the compressor.
- Position the compressor so that the exhaust is pointed away from people or animals.

DO NOT

 Use the compressor indoors or in an enclosed area. (i.e. in a warehouse, tunnel, well, hold etc.)

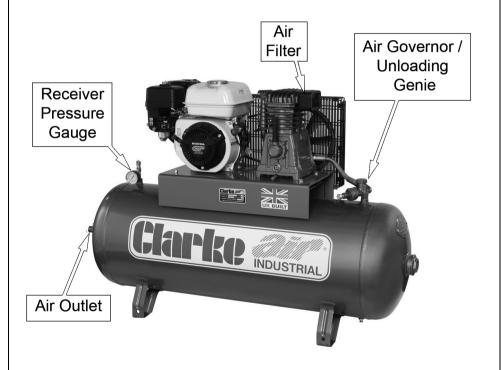


WARNING: EXHAUST FUMES CAN BE FATAL

GENERAL NOTES

- NEVER allow anyone, not fully familiar with compressors, to use this
 equipment.
- DO NOT alter the engine settings....these settings are set at the factory. Should they need re-calibration consult your Clarke dealer

OVERVIEW



PREPARATION FOR USE

A. ENVIRONMENTAL

- Ensure the compressor is sited on a firm level surface.
- Ensure the environment is dry and dust free.
- Ensure there is adequate ventilation for: (a) Air intake to compressor pump, (b) Cooling for compressor pump, (c) Engine exhaust gases.

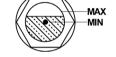
B. ENGINE

Check oil and fuel levels and a visual check of components. Refer to engine service manual.

C. PUMP

Check oil level on the sightglass - to level marked.

D. FUELLING



Fill with unleaded petrol, according to the instructions within the engine manual.

- Ensure the fuel tap is set to the required position.
- Ensure The fuel hose and connectors are intact, in perfectly serviceable condition and there is no leakage.

NOTE: Always use a funnel to fill the fuel tank so as to avoid accidental spillage of fuel. If fuel is spilled it must be removed from the unit and surrounding area, before attempting to start the engine.

E. RECEIVER

Drain off any condensate, by opening the drain cock (see Fig. 1).
 Remember to close the drain cock when completed.

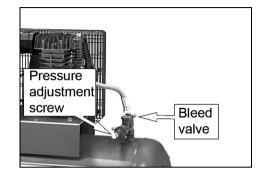
NOTE: This should be carried out DAILY when the compressor is in constant use.

F. AIR HOSE & AIR TOOL

- Attach the air hose to the outlet using an appropriate connector.
- Attach the air tool/spray gun to the air hose...If using snap couplings, use a whip end, available from your Clarke dealer.

STARTING THE COMPRESSOR

- 1. At the beginning of the day, open the drain cock and allow any condensate to drain completely, then close the drain cock.
- To ease starting, ensure there is no pressure in the pump outlet manifold by opening the Bleed valve.
- 3. Connect the air hose to the air outlet.
- 4. Connect your air tool to the air hose.
 - Make sure that the air outlet tap is closed



- 5. Start the engine in accordance with the instructions contained in the engine service manual, If this is the first time you are using the compressor, allow it to run for 10 minutes.
- 6. Close the bleed valve fully.
 - Pressure will build up in the receiver and eventually the air governor will
 operate so that the engine runs off load.
 - The pressure registered on the pressure guage should be 100psi.
- 7. Use your air tool as prescribed in its user guide.
 - When the pressure has dropped by approximatley 20psi the compressor will start up again.

STOPPING THE COMPRESSOR

- 1. At the end of the day, stop the compressor in accordance with the instructions in the engine manual,
- 2. Operate the air tool trigger or operating lever etc., to ensure there is no pressure in the air line, then disconnect airline and tool.



WARNING: DO NOT UNDER ANY CIRCUMSTANCES ATTEMPT TO REMOVE THE AIR TOOL OR DISCONNECT THE AIR HOSE UNTIL YOU ARE SATISFIED THAT THE PRESSURE HAS BEEN RELIEVED.

- 3. Finally, close the drain cock very slowly to release pressure in the tank...
- 4. Take care not to touch the engine or pump as they remain hot for some time after use.

MAINTENANCE

DAILY

- 1. Drain Air Receiver of any condensate
- Check engine oil level and top up where necessary. Ensure the dipstick breather hole is not blocked.
- 3. Check pump oil level

WEEKLY

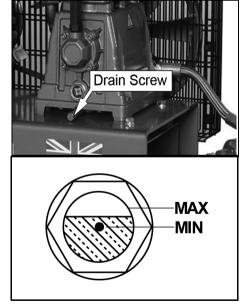
- 1. Clean Pump Air Filter
 - Unbolt the Pump Air Filter cover and pull away to reveal foam element.
 If badly contaminated, replace. Remove any loose contaminants if any then replace.
- 2. Clean the engine cooling fins.

6 MONTHLY

- 1. Renew pump lubricating oil.
- 2. Drain pump by removing the drain screw.

- 3. Replace screw and top up the oil to the level on the sightglass. Use SAE40 oil available from your Clarke dealer as follows:
 - Compressor oil 1 litre: Part No. 3050810
 - Compressor oil 5 litre: Part No. 3050802

In addition to the above, check the engine manual for service schedule.



Repairs should only be carried out by a qualified engineer. If problems occur, contact your Clarke dealer.

TROUBLESHOOTING CHART

IMPORTANT!

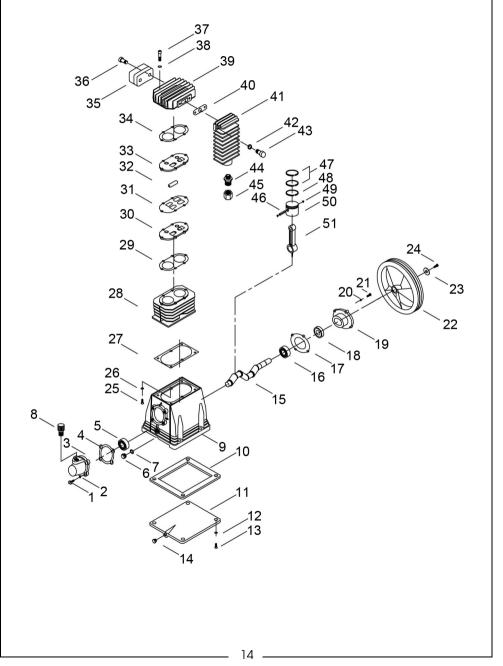
- 1. Any remedial work that may be required must be carried out by a qualified electrician/engineer.
- 2. Empty Air Receiver of Air before dismantling any part of the compressor unit's pressure system.
- 3. If your compressor develops a fault do not use until the fault has been rectified.

SYMPTOM	PROBABLE CAUSE	REMEDY	
Engine difficult to start	Load Genie leaking (compressor unit is on load during start).	Stop engine and empty air receiver. Clean or replace Load Genie	
	Load Genie valve blocked, possibly frozen up.	Thaw Load Genie out (Unit must be installed in frost-free place).	
Compressor unit constantly `on load'	Load Genie defective	Have Load Genie serviced or replaced	
	Load Genie set at a pressure higher than the safety valve's opening pressure	Contact Clarke Service Department	
	Load Genie leaking.	Contact Clarke Service Department	
Unusual noise from compressor.	Bolts loose.	Tighten bolts	
	Flywheel loose.	Tighten flywheel	
	Unit installed on an unsuitable base.	Move unit to a more solid base	
	Bearings, piston rings or cylinder worn.	Contact Clarke Service Department	
	Valve broken	Contact Clarke Service Department	

SYMPTOM	PROBABLE CAUSE	REMEDY
Compressor constantly 'on load' and cannot attain the working pressure required.	Suction filter blocked.	Clean / Change filter.
	Leak between compressor block and air receiver leaks in or near air receiver.	Tighten connection and repair leak.
	Valves blocked by dirt, paint, dust or choked up.	Contact Clarke Service Department
	Inspection cover or drain plug leaking.	Empty air receiver and change seals/plugs.
	Pressure gauge defective	Change pressure gauge.
	Unit too small in relation to air consumption.	Use a larger capacity compressor
	Compressor worn.	Have compressor overhauled or replace it.
Compressor becomes too hot.	Insufficient ventilation.	See that sufficient air is supplied to flywheel or fan of compressor and that hot air is properly vented.
	Oil level too low (check 2 or 3 minutes after stopping.	Fill with oil
	Fault in valves (machine not stopping).	Contact Clarke Service Department
	Blown head gasket (machine not stopping).	Contact Clarke Service Department
	Dirt on cooling fins or suction filter.	Clean cooling fins and suction filter.
	Unit working at too high a pressure.	Contact Clarke Service Department
	Not fully unloading	Contact Clarke Service Department
	Load genie partly blocked.	Contact Clarke Service Department

SYMPTOM	PROBABLE CAUSE	REMEDY	
Compressor unit runs on and off load more frequently than usual.	Large amount of condensation in air receiver.	Drain off condensation Regularly (Every day before use).	
	Leaks in system	Locate leaks (by means of soapy water) and repair.	
Compressor unit runs `on load' when no air is being used.	Leaks in system	Locate leaks (by means of soapy water) and repair.	
Compressor's oil consumption rising.	Too much oil in compressor.	Check oil level 2 or 3 minutes after stopping.	
	Leaks around crank case	Contact Clarke Service Department	
	Working temperature of compressor too high because of insufficient cooling.	Increase ventilation to air compressor.	
	Cylinder worn.	Contact Clarke Service Department	
	Intake air filter blocked	Clean or replace	
Oil in the air	Sump over full	Reduce oil to correct level.	
delivered.	Cylinder worn	Contact Clarke Service Department	
	Intake air filter blocked	Clean / Change air filter.	
Oil level rises although no oil has been put in.	Condensation in oil pump.	Compressor over dimensioned.	
Condensation	Piping installation incorrect.	Consult your local dealer	
at outlet points.	Compressor taking in air which is too warm.	Obtain better fresh-air supply to compressor.	

PUMP EXPLODED DIAGRAM



PUMP PARTS LIST

NO	DESCRIPTION	PART NO	NO	DESCRIPTION	PART NO
1	HEX SCREW	HS2065Z01	27	CYLINDER GASKET	HS2065Z27
2	SPRING WASHER	HS2065Z02	28	CYLINDER	HS2065Z28
3	FRONT COVER	HS2065Z03	29	VALVE PLATE GASKET	HS2065Z29
4	FRONT COVER GASKET	HS2065Z04	30	VALVE PLATE	HS2065Z30
5	BALL BEARING	HS2065Z05	31	ALUMINUM GASKET	HS2065Z31
6	OIL SIGHTGLASS	HS2065Z06	32	VALVE REED	HS2065Z32
7	OIL SIGHTGLASS SEAL	HS2065Z07	33	VALVE PLATE	HS2065Z33
8	BREATHER (M16*1.5)	HS2065Z08	34	HEAD COVER GASKET	HS2065Z34
9	CRANKCASE	HS2065Z09	35	AIR FILTER	HS2065Z35
10	BASEPLATE SEAL	HS2065Z10	36	HEX SCREW	HS2065Z36
11	BASEPLATE	HS2065Z11	37	HEX SCREW	HS2065Z37
12	SPRING WASHER	HS2065Z12	38	SPRING WASHER	HS2065Z38
13	HEX SCREW	HS2065Z13	39	HEAD COVER	HS2065Z39
14	OIL PLUG (G1/8")	HS2065Z14	40	AFTERCOOLER GASKET	HS2065Z40
15	CRANKSHAFT	HS2065Z15	41	AFTERCOOLER	HS2065Z41
16	BALL BEARING	HS2065Z16	42	SPRING WASHER	HS2065Z42
17	BEARING SEAT GASKET	HS2065Z17	43	HEX SCREW	HS2065Z43
18	OIL SEAL	HS2065Z18	44	CONNECTOR	HS2065Z44
19	BEARING SEAT	HS2065Z19	45	CONNECTOR NUT	HS2065Z45
20	SPRING WASHER	HS2065Z20	46	PISTON PIN	HS2065Z46
21	HEX SCREW	HS2065Z21	47	COMPRESSOR RING	HS2065Z47
22	FLYWHEEL	HS2065Z22	48	OIL RING	HS2065Z48
23	FLYWHEEL FLAT WASHER	HS2065Z23	49	PIN CLIP	HS2065Z49
24	FLYWHEEL SCREW	HS2065Z24	50	PISTON	HS2065Z50
25	HEX SCREW	HS2065Z25	51	CONNECTING ROD	HS2065Z51
26	SPRING WASHER	HS2065Z26			



PARTS & SERVICE: 0208 988 7400

E-mail: Parts @ clarke in ternational.com or Service @ clarke in ternational.com

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

CIAPEC INTERNATIONAL Hemnall Street, Epping, Essex CM16 4LG www.clarkeinternational.com