Clarke®

AIR COMPRESSOR

MODEL NO: CFP10H

PART NO: 2090903

OPERATING & MAINTENANCE INSTRUCTIONS

CE

ORIGINAL INSTRUCTIONS

GC0718 ISS 1

INTRODUCTION

Thank you for purchasing this CLARKE Engine Driven Compressor.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

IMPORTANT

WARNING: THIS SYMBOL IS USED THROUGHOUT THE USER GUIDE WHEN THERE IS A RISK OF PERSONNAL INJURY. MAKE SURE THAT THESE WARNINGS ARE READ AND UNDERSTOOD AT ALL TIMES.

CAUTION: THIS SYMBOL IS USED THROUGHOUT THE USER GUIDE WHEN THERE IS A RISK OF DAMAGE TO THE PRODUCT. MAKE SURE THAT THESE CAUTIONS ARE READ AND UNDERSTOOD AT ALL TIMES.

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.

GENERAL SAFETY PRECAUTIONS

Before using your compressor, read and pay attention to the following safety guidelines.

1. Make sure that all persons using the compressor have read and fully understand these operating instructions and had any necessary training

2. Compressed air is dangerous. Do not point a jet of air at persons or animals and do not discharge compressed air against the skin.
3. Repairs must only be carried out by a qualified engineer. If problems occur, contact your Clarke dealer.
4. Before carrying out any maintenance, make sure that the pressure is released from the air receiver.
5. DO NOT leave pressure in the air receiver overnight or when transporting.
6. DO NOT adjust or tamper with the safety valve. The maximum pressure is set at the factory.
7. DO NOT operate in wet or damp conditions. Keep the compressor dry at all times. Similarly, clean air will allow the compressor to work efficiently. Do not use in dusty or otherwise dirty locations.
8. Some metal parts can become hot during operation. Do not touch these until the compressor has cooled down.
9. Always set the pressure regulator to the recommended setting for the air tool being used.
10. When spraying flammable materials e.g. cellulose paint, ensure that there is sufficient ventilation and keep clear of any source of ignition.
11. Do not use this compressor in explosive atmospheres.
12. Do not operate this compressor in a confined space unless additional ventilation is provided.
13. Before spraying any material always consult paint manufacturers instructions for safety and usage.
14. Wear PPE such as goggles to protect your eyes from flying particles. Face masks will protect you against paint spray and fumes.
15. This compressor will produce noise levels in excess of 70dB(A). Persons working near the compressor must be equipped with ear protection.
16. Make sure that air hoses are not kinked or wrapped around the compressor and not subjected to strain.
17. When disconnecting air hoses from your compressor, make sure that the air supply is turned off at the outlet and vent all pressurised air from within the air receiver.
18. Make sure that children and animals are kept well away from the compressor and any airline equipment attached to it.
19. Make sure that any equipment or air tool used in conjunction with your compressor has a safe working pressure exceeding that of the compressor.
20. Take care when transporting the compressor to prevent tipping over with resultant spillage of fluids.

SAFETY SYMBOLS

	Refer to instruction manual/booklet.
	Hot surface
	Wear eye protection
	Wear ear protection
 LWA 97 dB	This compressor produces a high noise level during operation.

BEFORE USE

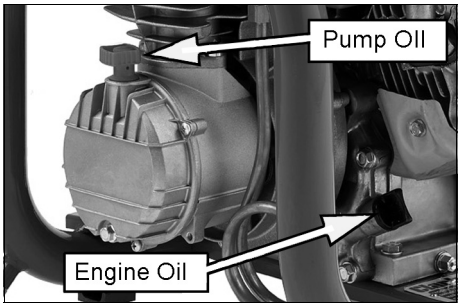
POSITIONING THE AIR COMPRESSOR IN THE WORKPLACE

1. Always carry the compressor using the handle.
2. Do not lift by (or put strain on) valves or hoses.
3. Before starting, ensure the compressor is standing on a firm level surface which does not exceed 10^{O} incline, either transversely or longitudinally.
4. Ensure the environment is dry and dust free.
5. Ensure there is adequate ventilation for:
   - Air intake to the compressor pump and engine.
   - Cooling for the compressor pump and engine.
   - Engine exhaust gases.

FILING WITH OIL

The engine and compressor are supplied without oil inside.

A 1 litre bottle of dual purpose oil is provided in the box and must be added before use (approx 0.6 L to the engine and 0.4 L to the pump).



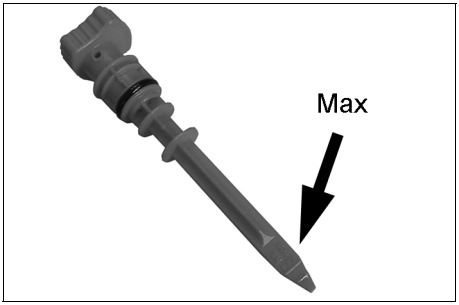
For future use, suitable oils are available from your Clarke dealer:

1 litre of SAE30 Engine oil - Part No. 3050852

1 litre of SAE30 Air Compressor oil - Part No. 3050796

AIR COMPRESSOR (PUMP)

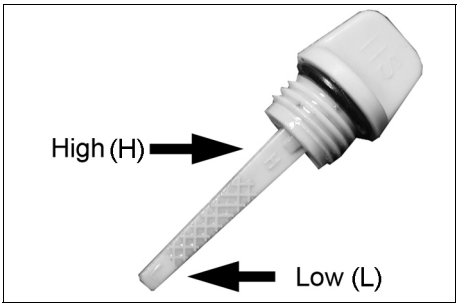
Remove the compressor dipstick and add 0.4 L of compressor oil to the compressor. Check the oil level on the dipstick



ENGINE

Remove the engine dipstick and add 0.6 L of engine oil to the engine. Check that the oil level on the dipstick is within the hatched area when the dipstick is removed from the engine.

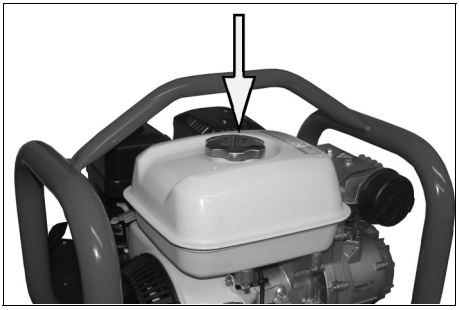
Ensure the oil level is visible between the high (H) and low (L) marks on the engine dipstick.



ADDING FUEL

Remove the filler cap and fill the tank with unleaded fuel. (Max capacity 1.8 L)

- Use a funnel to avoid accidental spillage of fuel.
- If fuel is spilled it must be cleaned from the unit and surrounding area before attempting to start the engine.
- Do not overfill.

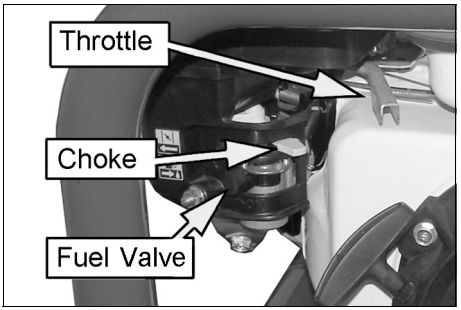


STARTING AND USING THE COMPRESSOR

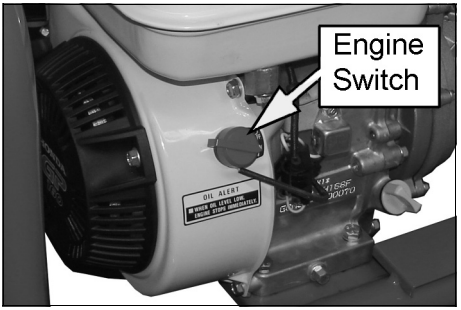
STARTING THE ENGINE FOR THE FIRST TIME

NOTE: For first time operation, do not connect the air hose or any tools and proceed as follows:

1. Turn fuel valve to the ON position.
2. Set the choke lever to the (starting) position.



3. Set the engine switch to the "I" (ON) position.



4. Hold the starting handle firmly and pull lightly until you start to feel resistance, then pull sharply to start the engine.

   NOTE: You may have to do this more than once.

WARNING: ONCE THE ENGINE HAS STARTED, ALLOW THE STARTING HANDLE TO RECOIL SLOWLY TO AVOID INJURY/DAMAGE AS IT WHIPS BACK.

5. When the engine is running steadily, gradually return the choke lever to the normal running position (to the right).
6. When the engine is running steadily, turn off and attach an air hose to the compressed air outlet and to the air driven tool.

OIL ALERT SYSTEM

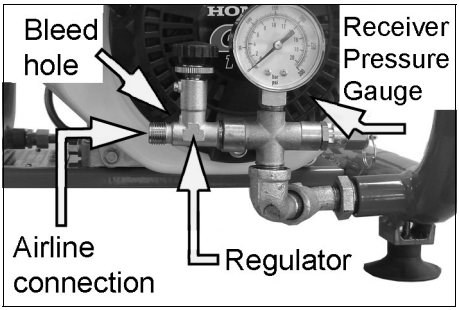
An oil alert system is fitted to prevent engine damage caused by insufficient oil in the crankcase. Before the oil can fall below a safe limit the oil alert system will automatically stop the engine although the throttle lever remains in a running position.

If the engine stops and will not re-start, check the engine oil level before troubleshooting other areas.

ATTACHING AIR TOOLS

WARNING: BEFORE CONNECTING AIR TOOLS, MAKE SURE THAT YOU READ THE INSTRUCTIONS SUPPLIED WITH THE TOOL. ENSURE THAT THE AIR TOOL IS SUITABLE FOR USE WITH THIS COMPRESSOR AND HOSE SPECIFICATIONS.

1. Attach the air hose to the air outlet using an appropriate connector.
2. Attach the air tool to the other end of the air hose.
   - If using snap couplings, use a whip end, available from your Clarke dealer.
3. Restart the engine and allow pressure to build up in the receiver.



   - The gauge will show the available pressure in the receiver.
4. Check the system for air leaks. If any are apparent, stop the engine and operate the air tool until the air pressure is at zero before rectifying leaks.

NOTE: A self-relieving regulator is fitted which will vent excess air pressure from the bleed hole when the pressure reaches the maximum. operating pressure for the compressor.

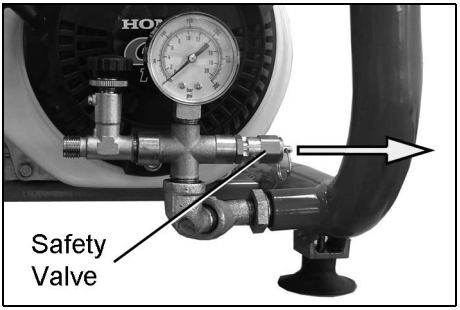
5. Turn the pressure regulator (clockwise to increase pressure) and proceed to use your air tool in accordance with its own product instructions.

CHECKING THE SAFETY VALVE

WARNING: DO NOT REMOVE OR TRY TO ADJUST THE SAFETY VALVE.

1. Check the safety valve to ensure that it works correctly.
2. Pull on the ring attached.
   - Air will be released when you pull on the ring and stop when released.

3. Do not use the compressor if the safety valve does not operate in this way.
   - The compressor must be repaired by a qualified service agent.

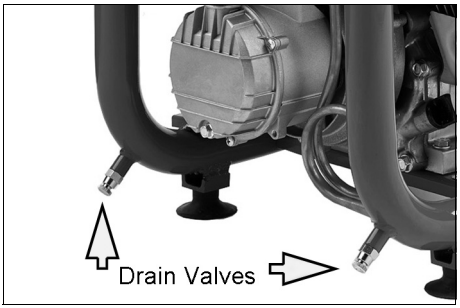


SUBSEQUENT STARTING

1. Connect the air hose to the air outlet and tool and set the pressure regulator to zero pressure (turned fully anticlockwise).
2. Start the engine and allow pressure to build up.
3. When the pressure in the receiver has built up and air is expelled at the vent hole, turn the outlet pressure regulator clockwise so that the desired pressure is shown on the pressure gauge.
4. Check for air leaks at the air tool and connectors before proceeding.

STOPPING THE COMPRESSOR

1. At the end of the day, stop the engine by turning the engine switch to OFF and closing the fuel valve.
2. Put a container below the drain valve to collect the condensate.
3. Open the drain valves slowly.
   - Condensation will drain from the air receiver.
4. Close the drain valve when the air receiver has fully drained.
5. Turn the air regulator fully anticlockwise to close off the air supply.



6. Operate the air tool to discharge any pressure in the air line before disconnecting the airline and the air tool.

CAUTION: TAKE CARE NOT TO TOUCH THE ENGINE OR COMPRESSOR AS THEY REMAIN HOT FOR SOME TIME AFTER USE.

CAUTION: 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 RELEASED.

COMPRESSED AIR REQUIREMENTS

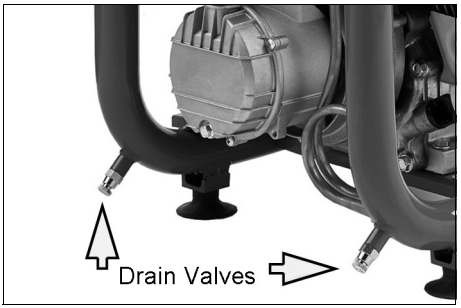
WARNING: COMPRESSED AIR CAN BE DANGEROUS. ENSURE THAT YOU ARE FAMILIAR WITH ALL PRECAUTIONS RELATING TO THE USE OF A COMPRESSED AIR SUPPLY.

- If an unusually long air hose is required, (over 8 metres), the line pressure or the hose inside diameter may need to be increased.
- The air hose must be rated at least 150% of the maximum operating pressure of the tool.
- If an automatic in-line lubricator/ filter is used it will keep the air tool in good condition but should be regularly checked & topped up with oil. Clarke air-line oil should be used and the lubricator adjusted to approx 2 drops per minute.
- Never exceed the maximum operating pressure for the air tool. Higher pressures and contaminated air will shorten the life of the tool due to faster wear and is a possible safety hazard.

MAINTENANCE

DRAIN THE AIR RECEIVER (DAILY/BEFORE USE)

After use, always open the drain valve(s) to make sure that any condensate is drained off.



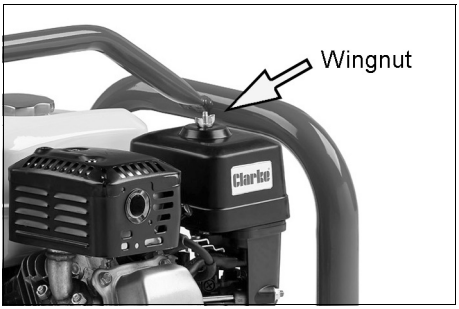
CHECK OIL (DAILY)

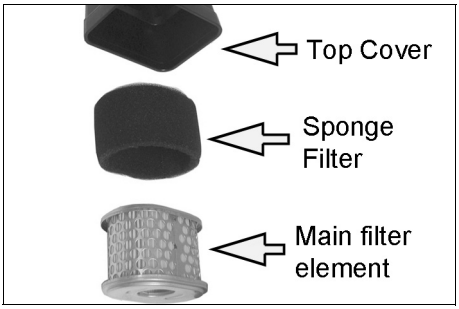
1. Check the engine oil level is between the Low and High marks on the dipstick and top-up if necessary.
2. Check the compressor oil level in the same way.
3. Remove each dipstick and wipe it clean, Insert the dipstick into the hole as far a s it will go, then remove it to check the oil level. Do not overfill. Refit the dipstick.

CLEAN THE COMPRESSOR AIR FILTER (MONTHLY)

The air filter must be examined monthly or more often in dusty conditions.

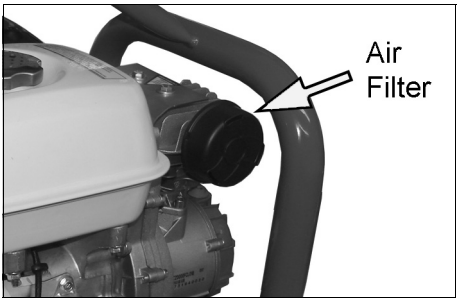
1. Remove the securing wingnut.
2. Lift off the top cover to expose the filter element.
3. Undo the second wingnut holding the filter in place and remove the filter.
4. If necessary, the outer sponge filter can be carefully cleaned in warm soapy water.
5. Rinse and let the sponge filter dry completely before refitting.
6. Clean the main filter element using a soft brush or a vacuum cleaner.
   - If the main filter element is damaged it must be replaced.
7. Refit the filters and replace the cover, securing with the wingnuts as above.



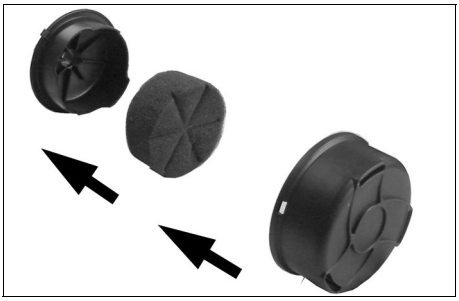


CHECK THE ENGINE INTAKE FILTER (3 MONTHLY/25 HOURS)

1. Unscrew the engine air intake filter assembly and prize off the outer cover by releasing the three small tabs around the perimeter to check the filter for cleanliness.
2. Tap the filter against a hard surface to dislodge loose dirt or blow through with compressed air.



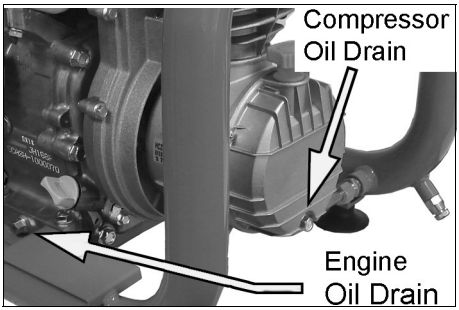
3. Do not brush off dirt as it will be forced into the filter fibres.
4. If necessary, the filter can be carefully cleaned in warm soapy water.
5. Rinse and let the filter dry completely before refitting.
    - If the compressor has been used in a dusty environment, the filter may need cleaning.



CHANGING THE OIL (6 MONTHLY/50 HOURS)

After the first 100 hours use, replace the oil using Clarke compressor oil and Clarke SAE30 engine oil. Thereafter, replace the oil after every 50 hours of operation or every 6 months.

To empty the oil from the either the compressor or engine remove the oil drain plug shown and drain into a suitable container.

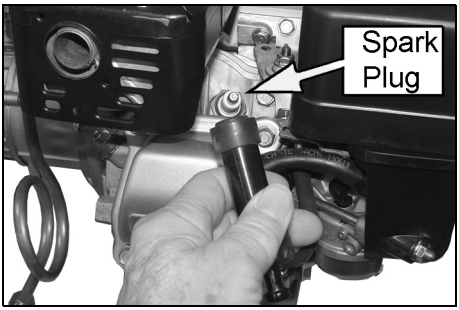


Drain the oil when the engine is warm when it will drain quickly and completely. A new washer should be used when replacing the drain plug.

CHECKING THE SPARK PLUG (YEARLY/EVERY 100 HOURS OF USE)

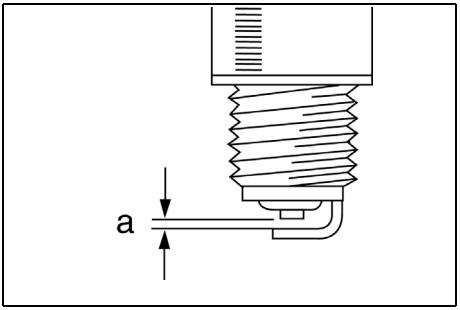
CAUTION: ALLOW THE ENGINE TO COOL BEFORE REMOVING THE SPARK PLUG.

1. Pull the spark plug cap and lead from the spark plug.
2. Use a spark plug spanner to remove the spark plug.
3. Check for discolouration and use abrasive to remove any build up of carbon.
4. Check the condition of the spark plug and replace if damaged.



5. Check the spark plug gap (a) with a feeler gauge. It should be between 0.6 and 0.7 mm.
   - Adjust if necessary by carefully bending the electrode.

   NOTE: Spark plugs are available from your Clarke dealer.



6. Re-fit the spark plug taking care not to cross thread it and tighten half a turn after the spark plug seats to compress the washer.
7. Refit the spark plug cap/lead.

EVERY 2 YEARS/250 HOURS

1. Carry out the oil changes.
2. Replace the spark plug and air filter.
3. Request your Clarke dealer to replace fuel lines.

DISPOSAL OF UNWANTED MATERIALS

One of the most damaging sources of environmental pollution is oil products. Never throw away used oil with domestic refuse or flush it down a sink or drain. Collect any oil in a leak proof container and take it to your local waste disposal site.

Should any components become completely unserviceable and require disposal plastic and metal should be disposed of according to local regulations.

SPECIFICATIONS

MODEL CFP10H	
Engine type	Honda GP160
Pump type	MK238
Air Receiver size	2.5 litres
Max Output Pressure	100 psi
Air Output volume	9 cfm
Outlet connector	1/4" BSP Male
Dimensions (L x W x H)	510 x 370 x 470 mm
Guaranteed Sound Power Level	97 dB(A)
Weight	21 kg
Engine Oil capacity	0.6 L
Fuel tank capacity	1.8 L

Please note that the details and specifications contained herein, are correct at the time of going to print. We reserve the right to change specifications at any time without prior notice.

TROUBLESHOOTING

CAUTION: DO NOT TRY TO REPAIR ITEMS IF YOU ARE UNCERTAIN. IF YOU HAVE ANY QUERIES, CONTACT YOUR CLARKE DEALER.

PROBLEM	PROBABLE CAUSE	REMEDY
The compressor fails to start	Engine switch is off.	Set the engine switch to 'on'.
	No fuel.	Add more fuel.
	Spark plug damaged or fouled.	Clean or change the spark plug.
	Fuel valve is closed.	Open fuel valve
	Insufficient starting pull.	Pull starter harder.
Engine difficult to start	Regulator blocked/not working placing compressor on load.	Drain receiver. Clean or replace regulator.
Compressor is constantly 'on load'	Defective regulator. Regulator set to a higher pressure than the safety valve's operating pressure	Service or replace regulator. Contact Clarke service Dept.
Compressor has stopped and does not start.	Faulty or contaminated carburetor.	Contact your Clarke service department.
Compressor runs on/off load more frequently that usual.	Improper or contaminated fuel.	Check fuel or replace.
	Dirt in fuel tank.	Clean out tank.
	Excess condensation in air receiver.	Drain off condensation regularly before use.
	Leaks in system.	Locate any leak using soapy water and repair.
Unusual noise from compressor	Unit installed on an unsuitable base. Compressor damaged and needs overhaul.	Move unit to a more solid base. Return the machine to your nearest service agent.
Compressor runs 'on load' when no air is being used.	Leaks in the system.	Locate leaks by means of soapy water and repair.

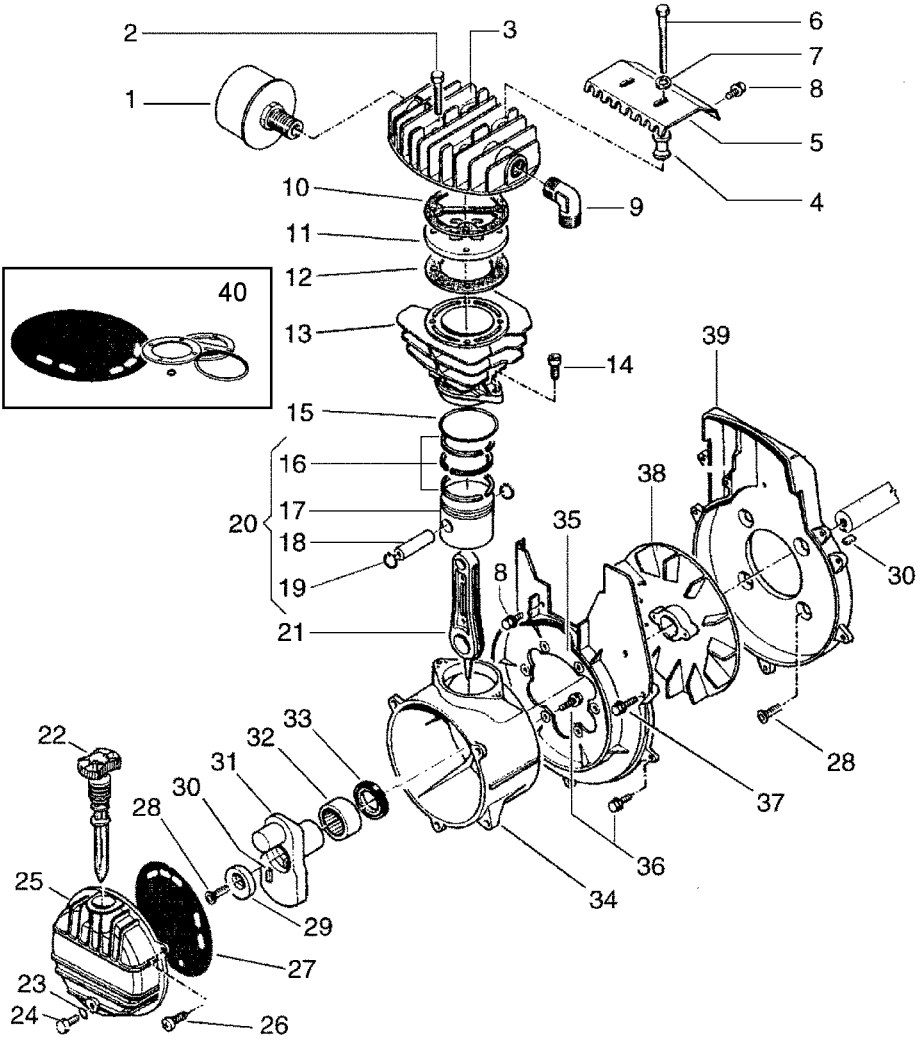
PROBLEM	PROBABLE CAUSE	REMEDY
Compressor is constantly 'on load' and does not reach the set pressure.	Inlet filter blocked. Pressure gauge defective.	Dismantle and clean or return the machine to your service agent.
	Leaks from air receiver fittings.	Locate and tighten any loose connections.
	Valves blocked by dirt.	Contact your Clarke service department.
	Pressure gauge defective.	Replace pressure gauge.
	Air leaks from cover or drain plugs.	Empty air receiver and change any leaking seals.
	Machine too small in relation to air consumption.	Obtain larger compressor.
Oil in the air delivered	Sump is over full. Cylinder parts badly worn. Intake air filter blocked.	Reduce to correct level. Contact your Clarke service department. Clean/change air filter.
Compressor's oil consumption rising	Too much oil in compressor. Leaks around crank case. Working temperature of compressor too high because of insufficient cooling. Cylinder worn. Intake air filter blocked.	Check oil level 2 or 3 minutes after stopping. Contact Clarke Service department. Increase ventilation to air compressor. Contact Clarke Service department. Clean or replace.
Oil level rises in compressor pump although none has been added.	Condensation in compressor pump.	Drain oil completely to remove condensate and contaminated oil.
Condensation at air outlet points	Compressor taking in air which is too warm.	Obtain better fresh air supply to compressor.
Engine cuts out and will not restart.	Lack of oil has caused the 'low oil cut-out' to trip and stop the engine.	Top up engine oil as shown on page 5.

PROBLEM	PROBABLE CAUSE	REMEDY
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 after stopping).	Top up oil.
	Blown head gasket.	Contact Clarke Service Department.
	Dirt on cooling fins or inlet filter.	Clean cooling fins and inlet filter.
	Unit working at too high a pressure.	Contact Clarke Service Department.
	Compressor being over-worked and running continuously.	Connect to a supplementary compressor or install a larger mode.

ANCILLARY COMPONENTS

No	Description	Part No
1	Pump Assembly MK238 Complete	1370005
2	Honda Engine (type GP160HQX3) 5HP	8000002
3	Drain Cock	2000221
4	Pressure Gauge	2000171
5	Safety Valve	2000191
6	Manifold 4-way	FN011276000
7	Rubber Foot	FN116011006
8	Regulator	FN347026000
9	Spark Plug	NGK BPR6ES
10	Engine Air Filter Set	HS17210ZE1505
11	Recoil Starter Assembly	HS28400ZDK003
12	Starter Pull-cord	HS28462ZDK003

PUMP COMPONENTS



COMPRESSOR COMPONENTS

No	Description	
1	Air Filter Assembly	FN317013000
2	Head Bolt M6 x 45	FN014002021
3	Cylinder Head	FN116001001
4	Spacer	FN116060015
5	Heat Shield	FN116060016
6	Screw M6 x 70	FN014002029
7	Washer 6.5 x 18	FN014005044
8	Screw M5 x 18	FN014013042
9	Elbow	FN011015000
10	Gasket	FN116022009
11	Valve Plate	FN116022100
12	Gasket	FN116022010
13	Cylinder	FN116022001
14	Screw M8 x 20	FN014011064
15	O-Ring	FN010114000
16	Piston Ring Set	FN216022002
17	Piston	FN116022004
18	Gudgeon Pin	FN116022040
19	Circlip	FN015001000
20	Piston Assembly	FN416022004

No	Description	
21	Connecting Rod	FN116091021
22	Dipstick	FN012035000
23	Washer	FN010072000
24	Screw M6 x 10	FN014013024
25	End Casing	FN016032014
26	Screw	FN014006083
27	Gasket	FN116001025
28	Screw	FN014022001
29	Eccentric Lobe	FN116060005
30	Key	FN116060006
31	Crankshaft	FN116060001
32	Bearing	FN033058000
33	Seal	FN010060000
34	Crankcase	FN116060011
35	End Casing	FN116060003
36	Screw M5 x 20	FN014013046
37	Screw M5 x 25	FN014013045
38	Fan	FN016060002
39	End Casing	FN116060004
40	Gasket Kit	FN216GA0001

A SELECTION FROM THE VAST RANGE OF

Clarke®

QUALITY PRODUCTS

AIR COMPRESSORS
From DIY to industrial, Plus air tools, spray guns and accesories.

GENERATORS
Prime duty or emergency standby for business, home and leisure.

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Hot and cold, electric and engine driven - we have what you need

WELDERS
Mig, Arc, Tig and Spot. From DIY to auto/industrial.

METALWORKING
Drills, grinders and saws for DIY and professional use.

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Saws, sanders, lathes, mortisers and dust extraction.

HYDRAULICS
Cranes, body repair kits, transmission jacks for all types of workshop use.

WATER PUMPS
Submersible, electric and engine driven for DIY, agriculture and industry.

POWER TOOLS
Angle grinders, cordless drill sets, saws and sanders.

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