

CLARKE®

air



AIRLINE LUBRICATOR

MODEL NO: CAT194

PART NO: 3120511

OPERATING & MAINTENANCE INSTRUCTIONS

ORIGINAL INSTRUCTIONS

GC0619 - ISS 1

INTRODUCTION

Thank you for purchasing this CLARKE Airline Lubricator.

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.

Your lubricator has been designed to give long and trouble free service. If, however, having followed the instructions in this booklet carefully, you encounter problems, take the unit to your local CLARKE dealer.

SPECIFICATIONS

	CAT194
Dimensions (D x W x H)	36 x 42 x 140 mm
Air Inlet /Outlet Size	1/4" BSP (female)
Max Flow	14 CFM
Max Inlet Pressure	150 psi
Max working Temperature	125 deg F

GENERAL SAFETY RULES



CAUTION: FAILURE TO FOLLOW THESE PRECAUTIONS COULD RESULT IN PERSONAL INJURY, AND/OR DAMAGE TO PROPERTY.

WORK ENVIRONMENT

1. Keep the work area clean and tidy.
2. Dress appropriately - do not wear loose clothing or jewellery. Tie long hair out of the way.
3. Keep children and visitors away - do not let children handle the air tools.
4. Do not operate air tools where there are flammable liquids or gases.

USE OF AIRLINE EQUIPMENT

1. Stay alert and use common sense - do not operate an air tool when you are tired or under the influence of alcohol, drugs or medication.
2. Do not overreach - Keep proper footing and balance at all times.
3. Never use oxygen, CO₂, combustible gases or any type of bottled gas as a source of power for air tools.
4. Do not exceed the maximum pressure for the airline component stated in the specification.
5. Check airline hoses for leaks or worn condition before use and ensure that all connections are secure.
6. Keep the air supply hose away from heat, oil and sharp edges.
7. Avoid damaging the component for example by applying excessive force of any kind.
8. Always maintain the air tool with care. Keep it clean for the best and safest performance.

COMPRESSED AIRLINE REQUIREMENTS



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

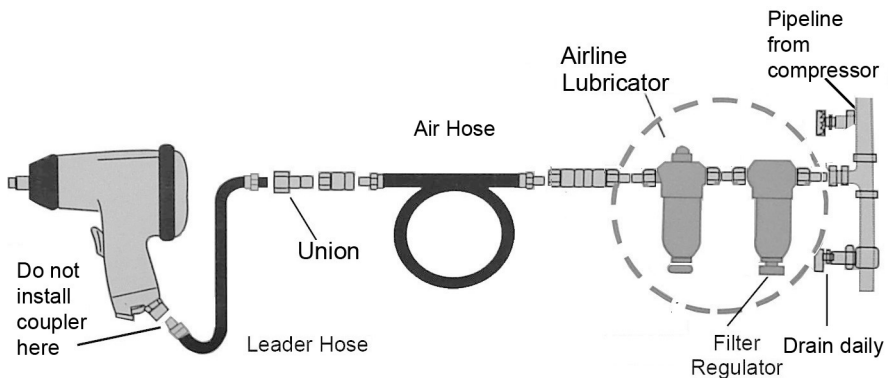
Use only clean, dry, regulated compressed air as a power source.

Air compressors must comply with the appropriate European Community Safety Directives.

A build-up of moisture in the air compressor will accelerate wear and corrosion in the air tool. Ensure any moisture is drained from the compressor daily and the airline filter is kept clean.

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 air tool.



A typical air line layout is shown above. If an automatic in-line filter/regulator is used it will keep the tool in good condition. The lubricator should be adjusted to approx 2 drops per minute and SAE 10 oil should be used.

Never exceed the maximum operating pressure for the air tool. Ensure that air pressure does not exceed that stated in the specification for the tool when running. Higher pressures and contaminated air will shorten the life of the air tool due to faster wear and is a possible safety hazard.

INSTALLATION

1. Ensure the compressor is turned off. Before using the airline, drain water from the air reservoir at the compressor.
 - The lubricator should be installed with reasonable accessibility for service whenever possible.
2. Keep pipe or tubing lengths to a minimum with the inside clean and free of dirt. Pipe joint compound should be used sparingly and applied only to the male pipe — never into the female port.
3. Avoid using PTFE tape to seal pipe joints — pieces have a tendency to break off and lodge inside the unit, possibly causing malfunction. Also a new pipe or hose should be installed between the lubricator and the equipment being protected.
4. Install the lubricator so that air flows as marked by the arrow on the lubricator body.
5. Installation should be downstream of the filter and regulator but upstream of the device it is to lubricate (valve, cylinders, tool, etc.).
6. A filter installed upstream of the lubricator is recommended.

7. Install the lubricator vertically with the bowl drain mechanism at the bottom. Any free moisture will thus drain into the area at the bottom of the bowl.
8. Fit the mounting bracket to a suitable support, situated in line with the compressed air supply.
 - Ensure sufficient free space above the lubricator for future access.
9. Fit the lubricator to the mounting bracket from below and secure with the retaining ring.
 - Note the arrow mark on the regulator body, indicating the direction of air flow.
10. Remove the blanking plugs from the connection ports and connect to the supply and delivery hoses.
11. Your lubricator is now ready for use.

FILLING AND ADJUSTMENT

1. Ensure that the pressure to the air inlet of the lubricator from air line does not exceed the maximum pressure specified in the instructions.
2. Shut off inlet air pressure and reduce the inlet and outlet lines to zero. Remove the bowl and fill with oil. Use good quality, light, misting type of oil for air-powered tool/motor.
3. Fill the oil to the maximum fill line on the bowl. **DO NOT OVERFILL.**
4. Re-install the bowl and turn fully clockwise into the body before pressurizing. Tighten hand-tight.
5. Turn on the air line system to obtain the required pressure to the lubricator.
6. Adjust the lubricator drip rate only when there is a constant rate of air flow through the lubricator. Monitor the drip rate through the sight feed dome.
7. Determine the average rate of air flow through the lubricator. Turn the slotted rotator in the sight feed dome to obtain the recommended drops per minute. See Drip Rate Chart. Turn the rotator anti-clockwise to increase the drip rate or clockwise to decrease the drip rate.
8. Monitor the device being lubricated for a few days following the above drip rate adjustment and see how well the device works, then determine whether the drip rate at the lubricator should be adjusted for higher or lower level.
9. **NEVER** apply lubricated compressed air to run a spray gun, since paint mixed with oil will spoil the finish of workpiece being sprayed.

DRIP RATE CHART

Flow (CFM)	Drops per minute
0.5	4
1	5
2	8
3	10
4	12
5	14

Flow (CFM)	Drops per minute
6	16
7	19
8	21
9	23
10	25

MAINTENANCE

DISASSEMBLY

1. The lubricator can be disassembled without removal from air line.
2. Shut off the inlet pressure. Reduce pressure in inlet and outlet lines to zero.
3. Remove the bowl by turning anti-clockwise.
4. Do not remove the drain valve unless replacement is necessary. Remove and replace only if the drain malfunctions. Remove and replace cartridge assembly only if lubricator malfunctions.

CLEANING

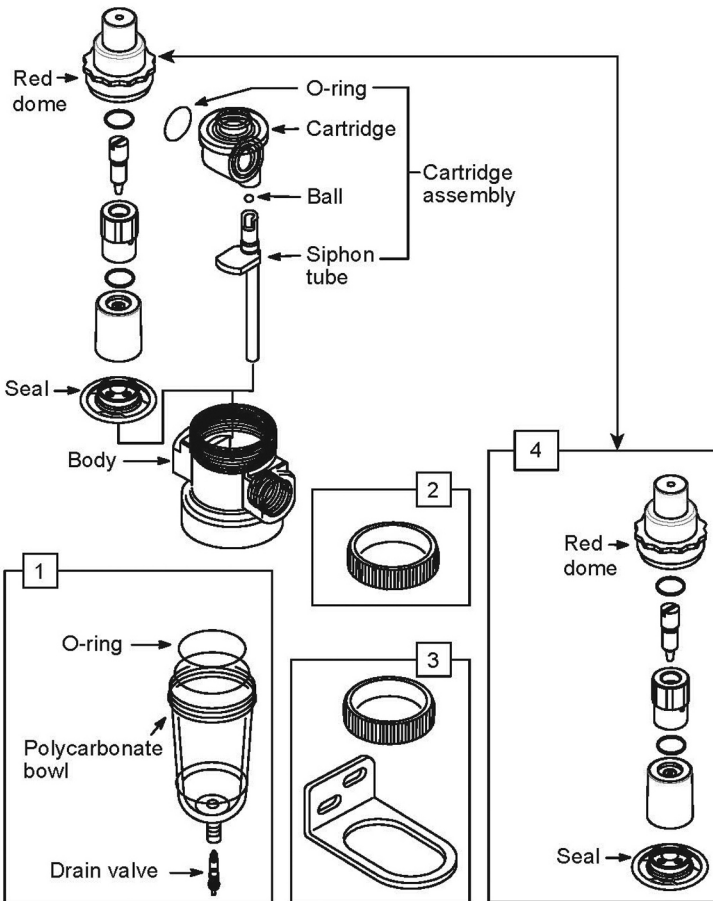
1. Clean the plastic bowl with warm water only. Clean other parts with warm water and soap.
2. Rinse and dry all parts. Blow out internal passages in the body with clean, dry, compressed air.
3. Inspect all parts. Replace any found to be damaged. Replace the plastic bowl with a metal bowl if plastic bowl shows signs of cracking or cloudiness.

ASSEMBLY

1. Assemble as shown on page 7 using the torque values listed in the table. Lubricate all o-rings with o-ring grease.

Torque Settings	
Part	Inch Pounds (Nm)
Drain	1.5 to 2.5 (0.17 to 0.28)
Bowl	5 to 10 (0.56 to 1.13)
Dome	20 to 25 (2.3 to 2.8)

PARTS LIST & DIAGRAM



No	Description
1	Polycarbonate bowl assembly
2	Mounting ring

No	Description
3	Universal wall bracket & ring
4	Oil adjusting dome assembly

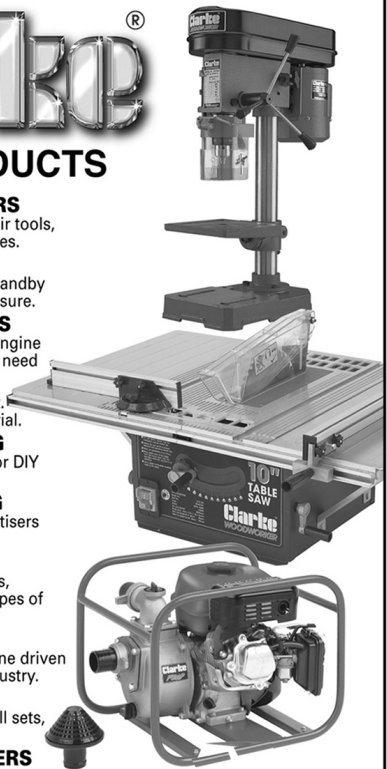
ACCESSORIES

A wide range of accessories is available including filter/regulators, lubricators, high-pressure hoses (5 to 50 metres) etc. Contact your CLARKE dealer for further information or CLARKE International Service Department.

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