

# **PRESSURE REGULATOR**

### For use with models AT100,130,131 & 150

Part No: 8134140

# OPERATING & MAINTENANCE INSTRUCTIONS

GC0509

### INTRODUCTION

Thank you for purchasing this CLARKE Pressure Regulator.

Before attempting to use the product, 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 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.

### **ENVIRONMENTAL PROTECTION**



Do not dispose of this product with general household waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of appropriately.

### FUNCTION

This pressure regulator is ideal for use with most TIG welding machines, in particular, the CLARKE AT welder range.

The function of the pressure regulator is to reduce and stabilise the pressure of a gas supply stored in the cylinder. It is used to reduce the pressure to a level which is suitable for use with standard welding equipment.

The pressure regulator has been designed to be used exclusively with the type of gas, and at the pressure indicated in the Technical Specification on page 7.

IMPORTANT: To use the pressure regulator with types of gasses and pressures other than  $CO^2$  or Argon could be dangerous.

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### **GENERAL SAFETY PRECAUTIONS**

IMPORTANT! In addition to the following precautions, you should read, and fully comply with, all instructions and safety precautions that were supplied with your Welder. Please keep these instructions in a safe place for future reference.

- 1. Incorrect use of the pressure regulator can cause serious damage or injury.
- 2. Always check that the regulator is the correct model for the type of gas being used.
- 3. This pressure regulator must be treated as a precision instrument and be protected from impact, dust, oil and dirt.
- 4. Never use the pressure regulator if it is not in perfect working order.
- 5. When drawing gas from the cylinder, it must always be stood upright and be protected from falling.
- 6. Always ensure that any inlet connection gasket is in place and in good condition.

### ASSEMBLY

#### CONNECTION OF THE PRESSURE REGULATOR

#### Note; The numbers in brackets refer to the parts diagram on page 6.

- 1. Check to ensure the pressure regulator is correct both for the type of gas and the pressure in the cylinder to be used.
- 2. Turn the pressure adjuster (4) fully anti-clockwise, (towards the mark) to ensure the pressure adjuster value is closed.
- 3. Before screwing on the pressure regulator, ensure that the outlet is absolutely free from any impurities or contamination.
- 4. Replace any gasket if damaged or lost (CO<sup>2</sup> applications ONLY).
- 5. Screw the inlet connection (2) tightly to the cylinder valve, using a suitable spanner.

#### HOSE CONNECTION

1. Attach the hose to the hose outlet connection (5) and tighten with suitable worm drive clamps (not provided), ensuring the connection is tight.



### **INSTRUCTIONS FOR USE**

#### **OPENING THE PRESSURE VALVE**

1. Check to ensure the regulator is completely closed (turn the pressure adjuster knob (4) fully anticlockwise).

## WARNING: OPENING THE CYLINDER VALVE TOO QUICKLY MAY CAUSE THE GAUGE TO MALFUNCTION.

- Turn the pressure adjuster (4) very slowly clockwise. The pressure gauge (3) will indicate the outlet pressure.
- 3. To increase pressure, slowly turn the pressure adjuster (4) clockwise until the reading on the gauge is at the pressure you require.
- 4. To decrease pressure, slowly turn the pressure adjuster (4) anti-clockwise.
- 5. As the gas is used up and the pressure drops, compensate by screwing the pressure adjuster (4) clockwise to maintain the outlet pressure.
- 6. Outlet pressure must not be adjusted higher than the pressure you need to use.

#### SHUTTING DOWN

- 1. ALWAYS release the pressure from the regulator when not in use, and remember to turn OFF the gas supply as soon as you have finished welding.
- 2. Close the cylinder valve (1).
- 3. Release the gas pressure, by operating the welding equipment until the regulator gauge indicates "zero" and no more gas can be heard exhausting.
- 4. Turn the pressure adjuster (4) anti-clockwise until it is completely closed.

## Note; ALWAYS close the cylinder valve before attempting to change an empty cylinder.

#### **RELIEF VALVE**

For safety reasons, the pressure regulator is equipped with a pressure relief valve.

In case of malfunction, this valve allows gas delivered at excessive pressure to escape.

#### WARNING: DO NOT TAMPER WITH THE PRESSURE RELIEF VALVE.

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### MAINTENANCE

Do not attempt to carry out maintenance or repairs yourself.

- Do not dismantle the regulator. Return it to your Clarke dealer for servicing.
- Do not clean gauge lens with solvents/petrol etc.

#### MALFUNCTIONS

Do not use the pressure regulator if:

- The pressure regulator or any of its parts (gauge, inlet connection, outlet connection) are damaged or dirty, oily etc.
- There are any leaky connections.
- The pressure relief valve has been tampered with, or is leaking.
- If the gauge malfunctions during use, (e.g. leaks) stop work immediately and close the cylinder valve.

Return the regulator to your dealer to be checked and repaired.

#### CHECKING FOR LEAKS

Checking for leaks must be carried out only in the open air. Use soapy water as a gas leak detector. **Do not use a flame.** 

- Spray a suitable leak detector or apply soapy water onto the area to be checked.
- The forming of any bubbles or foam is an indication of a leak.

#### STORAGE

The pressure regulator must be treated as a precision instrument. When it is not to be used for long periods, store it in its packaging or in its box to prevent contact with dust, oil and other sources of contamination.



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### MARKINGS

Product code markings can be found around the circumference of the regulator body as follows;

- 1. K Pressure reducer class (1)
- 2. N Gas type
- 3. 091269 Lot number
- 3. 230 bar maximum inlet pressure (P1)

### **TECHNICAL SPECIFICATION**

Feature	Specification
Pressure reducer class	Class 1
Gas types	CO <sup>2</sup> or Argon
Max inlet pressure (P1)	230-bar
Max outlet pressure (P2)	4-bar
Flow volume	Q1 m3/h
Gauge Size	50mm dia
Diaphragm size	38.5mm

### PARTS & SERVICING

For parts & Servicing, please contact your nearest dealer, or CLARKE International, on one of the following numbers.

PARTS & SERVICE TEL: 020 8988 7400 PARTS & SERVICE FAX: 020 8558 3622 or e-mail as follows: PARTS: Parts@clarkeinternational.com SERVICE: Service@clarkeinternational.com





www.clarkeinternational.com